

Archaeological Institute of America

DUPLICATE
REJECTED

AMERICAN
JOURNAL OF ARCHAEOLOGY

Second Series

THE JOURNAL OF THE ARCHAEOLOGICAL
INSTITUTE OF AMERICA

VOLUME II

1898



133282

NORWOOD, MASS.

PUBLISHED FOR THE INSTITUTE BY

The Norwood Press

NEW YORK: THE MACMILLAN COMPANY

LONDON: MACMILLAN & CO., LTD.

913
RE
MS

AMERICAN JOURNAL OF ARCHAEOLOGY

SECOND SERIES

THE JOURNAL OF THE ARCHAEOLOGICAL INSTITUTE OF AMERICA

Vol. II, 1898

Editorial Board

Editor-in-Chief

JOHN HENRY WRIGHT,
Professor in Harvard University.

Associate Editors

JAMES R. WHEELER (*for the American School at Athens*),
Professor in Columbia University.

ALLAN MARQUAND (*for the American School in Rome*),
Professor in Princeton University.

HAROLD N. FOWLER,
Professor in Western Reserve University.

HENRY W. HAYNES,
Late Professor in the University of Vermont.

Honorary Editors

JOHN WILLIAMS WHITE (*President of the Institute*),
Professor in Harvard University.

THOMAS DAY SEYMOUR (*Chairman of the Managing Committee of the School at Athens*),
Professor in Yale University.

WM. GARDNER HALE (*Chairman of the Managing Committee of the School in Rome*),
Professor in the University of Chicago.

Editorial Contributors

MISS MARY H. BUCKINGHAM,
Classical Archaeology.

PROFESSOR HENRY E. BURTON,
Roman Archaeology.

PROFESSOR JAMES C. EGBERT, JR.,
Roman Epigraphy.

PROFESSOR ELMER T. MERRILL,
Roman Archaeology.

GEORGE N. OLCOTT, Esq.,
Numismatics.

PROFESSOR JAMES M. PATON,
Classical Archaeology.

DR. GEORGE A. REISNER,
Oriental Archaeology.

PROFESSOR HERBERT WEIR SMYTH,
Greek Epigraphy.

7
Per
A 5128 A
v. 2

CONTENTS

	PAGE
Council of the Archaeological Institute of America	ix
Officers of the Affiliated Societies	xi
Managing Committee of the School at Athens	xv
Managing Committee of the School in Rome	xvii
Foreign Honorary Members of the Institute	xx
ARCHAEOLOGICAL INSTITUTE OF AMERICA:	
Nineteenth Annual Report of the Council, 1897-98.	
— JOHN WILLIAMS WHITE, <i>President</i>	465
Cretan Expedition of the Institute:	
IX. Inscriptions from Gortyna, Lyttos, and Lató pros Kamara.	
— S. A. XANTHOUDIDIS	71
X. Addenda to the Cretan Inscriptions. — F. HALBHERR . . .	79
Pausanias's <i>Description of Greece</i> . — H. N. FOWLER	357
The Washim Papyrus of <i>Iliad</i> Θ 1-68 (Plate XII).	
— E. J. GOODSPEED	347
The Artemis Brauronia of Praxiteles. — JOHN PICKARD . . .	367
The Orpheus Relief. — JOHN PICKARD	169
Notes on Oriental Antiquities: 1. The Horse in Ancient Babylonia.	
2. Nehushtan. 3. A Hittite Cylinder Seal. — W. H. WARD . .	159
The Identification of the Marbles used in Greek Sculpture.	
— HENRY S. WASHINGTON	1
AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS:	
Seventeenth Annual Report of the Managing Committee, 1897-98.	
— THOMAS DAY SEYMOUR, <i>Chairman</i>	479
Report of the Director, 1897-98. — R. B. RICHARDSON	491
Terra-cotta Reliefs from the Argive Heraeum (Plates I, II).	
— C. WALDSTEIN, J. C. HOPPIN	173
The <i>Eiskyklema</i> in the Eretrian Theatre (Plates III-V).	
— ANDREW FOSSUM	187
An Old Corinthian Vase from Corinth (Plates VI, VII).	
— R. B. RICHARDSON	195
Terra-cotta Figurines from Corinth. — R. B. RICHARDSON . . .	206

iii

133282

~~38923~~

	PAGE
AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS — <i>Continued</i> :	
A Trace of Egypt in Eleusis (Plate VIII). — R. B. RICHARDSON	223
The Excavations at Corinth in 1898: Preliminary Report (Plates IX-XI). — R. B. RICHARDSON	233
AMERICAN SCHOOL OF CLASSICAL STUDIES IN ROME:	
Third Annual Report of the Managing Committee, 1897-98.	
— WILLIAM GARDNER HALE, <i>Chairman</i>	504
Report of the Director, 1897-98. — CLEMENT L. SMITH	514
The Epigraphic Sources of Suetonius. — W. DENNISON	26
Some New Inscriptions from Puteoli, Baiae, Misenum, and Cumae.	
— W. DENNISON	373
Two Notes: 1. On Some Oscan Inscriptions. 2. On <i>Commentarium Actorum Saecularium Quintorum</i> , l. 64. — W. DENNISON	399
ARCHAEOLOGICAL NEWS AND DISCUSSIONS (August, 1897-February, 1898). — H. N. FOWLER, <i>Editor</i> :	
NEWS OF RECENT EXCAVATIONS AND DISCOVERIES; OTHER NEWS	95
<i>Oriental and Classical Archaeology</i> : — General and Miscellaneous, 95; Egypt, 98; Babylonia, 103; Mesopotamia, 103; Persia, 104; Palestine, 104; Phoenicia and Syria, 107; Arabia, 108; Cyprus, 108; Asia Minor, 108; Greece, 110; Italy, 117; Spain, 125; France, 126; Switzerland, 127; Germany, 127; England, 130; Bulgaria, 132; Roumania, 132; Africa, 133; United States, 134.	
<i>Early Christian and Mediaeval Art</i> : — Greece, 151; Armenia, 152; France, 152; Holland, 153; Germany, 154; Hungary, 154; England, 154.	
<i>Renaissance Art</i> : — Italy, 155; Germany, 157; Austria, 157.	
SUMMARIES OF ARTICLES IN RECENT PERIODICALS	237
<i>Oriental and Classical Archaeology</i> : — General and Miscellaneous, 237; Egypt, 239; Babylonia and Assyria, 240; Palestine, 241; Syria, 241; Asia Minor, 245; Greece, 249 (Architecture, 249; Sculpture, 261; Vases and Painting, 279; Inscriptions, 289; Coins, 304; Miscellaneous, 305); Italy, 317 (Architecture, 317; Sculpture, 319; Painting and Vases, 321; Inscriptions, 321; Coins, 323; Miscellaneous, 324); France, 328; Spain, 329; Germany, 329; Bulgaria, 332; Africa, 334.	
<i>Early Christian and Mediaeval Art</i> : — General and Miscellaneous, 337; Italy, 339; France, 340; Belgium, 340; England, 341; Algeria, 341.	
<i>Renaissance Art</i> : — Italy, 342; France, 343; Germany, 343; Belgium, 345; England, 345.	

CONTENTS

V

ARCHAEOLOGICAL BIBLIOGRAPHY (January-June, 1898).

PAGE

— H. N. FOWLER, <i>Editor</i>	403
General and Miscellaneous	403
Egyptian Archaeology	410
Oriental Archaeology	413
Classical Archaeology	417
Greek and Roman	417
Greek (I, General and Miscellaneous, 421; II, Architecture, 427; III, Sculpture, 428; IV, Vases and Painting, 430; V, Inscrip- tions, 431; VI, Coins, 433)	421
Roman (I, General and Miscellaneous, 434; II, Architecture, 446; III, Sculpture, 447; IV, Vases and Painting, 448; V, Inscrip- tions, 449; VI, Coins, 454)	434
Christian Art	455
(I, General and Miscellaneous, 455; II, Byzantine and Mediaeval, 457; III, Renaissance, 461.)	

BULLETIN

Annual Reports of the Council of the Institute and of the Schools at

Athens and Rome, 1897-98. <i>Appendix</i>	1
Archaeological Institute of America:	
Council of the Institute, 1898-99	3
Members of the Institute, 1898-99:	
Foreign Honorary Members	10
Members of the Affiliated Societies, — Boston, New York, Balti- more, Pennsylvania, Chicago, Detroit, Wisconsin, Cincinnati, Cleveland, Washington, New Haven	10
Regulations of the Institute, 1898-99	58
Rules of the Affiliated Societies, 1898-99	62
Financial Statement, 1897-98	78
American School of Classical Studies at Athens:	
Managing Committee, 1898-99	5
Colleges Cooperating in the Support of the School, 1898-99	6
Trustees of the School, 1898-99	6
Managing Committee and Directorate, 1881-99	40
Faculty and Students, 1897-98	44
Fellows and Students, 1882-99	45
Regulations, 1898-99	69
Financial Statement, 1897-98	80
Contributors to the School, 1897-98	84
Fellowships for 1899-1900	99
Examination Papers for Fellowships, 1897-98	101
Circular of Information for Students	115
Books recommended to Students	118

	PAGE
American School of Classical Studies in Rome:	
Managing Committee, 1898-99	7
Faculty and Students, 1897-98	53
Fellows and Students, 1895-99	54
Regulations of the School, 1898-99	74
Financial Statement, 1897-98	82
Contributors to the School, 1897-98	85
Fellowships for 1899-1900	99
Examination Papers for Fellowships, 1897-98	109
Circular of Information for Students	115
Books recommended to Students	118
Publications, 1879-98	89
Casts, Photographs, and Lantern Slides	97

PLATES

- I. Terra-cotta Plaques from the Argive Heraeum (Nos. 1-5).
- II. Terra-cotta Plaques from the Argive Heraeum (Nos. 6-10).
- III. Theatre at Eretria, 1891: General View of Stage Buildings.
- IV. Theatre at Eretria, 1891: Track of *Eiskyklema*.
- V. Theatre at Eretria, 1891.
- VI. Celebe from Corinth.
- VII. Celebe from Corinth.
- VIII. Ram's Head from Eleusis.
- IX. Corinth in 1898: General View of Excavations.
- X. Corinth in 1898: Ancient Road.
- XI. Corinth in 1898: Pirene.
- XII. The Washim Papyrus of *Iliad* Θ 1-68.

ILLUSTRATIONS IN TEXT

	PAGE
Parian Marble: Section in Ordinary Light	10
Parian Marble: Section in Polarized Light	10
Pentelic Marble: Section in Ordinary Light	12
Marble of Porphyritic Structure: Section in Ordinary Light	12
Stylobate of the Temple of Jupiter Capitolinus	20
Fragment of a Corinthian Capital from the Temple of Jupiter Capitolinus	22
Capital of the Temple of Vespasian	25
Bel in his Chariot: Seal in the Metropolitan Museum	160
Horse and Four-wheeled Chariot: Pre-Sargonic Seal belonging to W. H. Ward	161
Hittite Seal with <i>Ashera</i> , Serpent, and Worshipper: Cylinder belonging to W. H. Ward	163
Seated God with Serpent Tail: Cylinder in the British Museum	164
Hittite Cylinder with Representations of Cuttlefish and Other Animals: belonging to Mrs. Henry Draper	165
Cuttlefish on Mycenaean Vase	166
Cylinder with Cuttlefish: belonging to W. H. Ward	167
<i>Eiskyklema</i> in the Eretrian Theatre: Ground Plan, restored	188
Vaulted Passage and Foundation for <i>Eiskyklema</i> : Elevations	189
Vaulted Passage in the Theatre of Eretria: from Photograph	190
Celebe from Corinth	196
Fifteen Archaic Terra-cotta Figurines from Corinth	208-211
Nineteen Later Terra-cotta Figurines	211-219
Athena: Corinthian Terra-cotta of the Best Period	221
Excavations in Corinth in 1898: Sketch Plan	235, 500

Archaeological Institute of America

COUNCIL OF THE INSTITUTE

1898-1899

President

PROFESSOR JOHN WILLIAMS WHITE, Ph.D., LL.D., *Harvard University*, of the Boston Society.

Honorary Presidents

PROFESSOR CHARLES ELIOT NORTON, Litt.D., LL.D., *Harvard University*, of the Boston Society.

PRESIDENT SETH LOW, LL.D., *Columbia University*, of the New York Society.

Vice-Presidents

MR. CHARLES P. BOWDITCH, A.M., *Boston*, of the Boston Society.

PRESIDENT DANIEL C. GILMAN, LL.D., *Johns Hopkins University*, President of the Baltimore Society.

MR. MARTIN A. RYERSON, LL.B., *Chicago*, of the Chicago Society.

HON. STEPHEN SALISBURY, A.M., LL.B., *Worcester*, of the Boston Society.

PROFESSOR THOMAS DAY SEYMOUR, LL.D., *Yale University*, of the New York Society.

Secretary

MR. CLARENCE H. YOUNG, Ph.D., *Columbia University*, of the New York Society.

Treasurer

MR. JAMES LOEB, A.B., *27 and 29, Pine Street, New York*, of the New York Society.

Editor-in-Chief of the Journal

PROFESSOR JOHN HENRY WRIGHT, A.M., *Harvard University*, of the Boston Society.

Other Members of the Council

MR. CYRUS ADLER, Ph.D., *Washington*, of the Washington Society.

MISS CLARA AVERY, *Detroit*, of the Detroit Society.

MR. SELDEN BACON, A.M., LL.B., *New York*, of the Wisconsin Society.

- MR. DAVID L. BARTLETT, *Baltimore*, of the Baltimore Society.
MR. GEORGE W. BATES, *Detroit*, of the Detroit Society.
MR. CHARLES P. BOWDITCH, *Boston*, of the Boston Society.
MR. CLARENCE H. CLARK, *Philadelphia*, of the Pennsylvania Society.
PROFESSOR MARTIN L. D'OOGHE, Ph.D., LL.D., *University of Michigan*, President of the Detroit Society.
PRESIDENT TIMOTHY DWIGHT, D.D., LL.D., *New Haven*, President of the New Haven Society.
PROFESSOR HAROLD N. FOWLER, Ph.D., *Western Reserve University*, of the Cleveland Society.
PROFESSOR ARTHUR L. FROTHINGHAM, JR., Ph.D., *Princeton University*, of the Baltimore Society.
PROFESSOR WILLIAM W. GOODWIN, Ph.D., LL.D., D.C.L., *Harvard University*, of the Boston Society.
MR. MALCOLM S. GREENOUGH, A.B., *Cleveland*, President of the Cleveland Society.
PROFESSOR WILLIAM GARDNER HALE, LL.D., *University of Chicago*, President of the Chicago Society.
MR. CHARLES L. HUTCHINSON, LL.D., *Chicago*, of the Chicago Society.
MR. GARDINER M. LANE, A.B., *Boston*, of the Boston Society.
MRS. NICHOLAS LONGWORTH, *Cincinnati*, President of the Cincinnati Society.
HON. FRANKLIN MACVEAGH, *Chicago*, of the Chicago Society.
PROFESSOR ALLAN MARQUAND, Ph.D., L.H.D., *Princeton University*, of the New York Society.
MISS ELLEN F. MASON, *Boston*, of the Boston Society.
PROFESSOR EDWARD P. MORRIS, A.M., *Yale University*, of the New Haven Society.
MRS. ALICE FREEMAN PALMER, L.H.D., LL.D., *Cambridge*, of the Boston Society.
PROFESSOR EDWARD DELAVAN PERRY, Ph.D., *Columbia University*, President of the New York Society.
REV. JOHN P. PETERS, Ph.D., *New York*, of the New York Society.
MR. FREDERIC J. DE PEYSTER, A.M., LL.B., *New York*, of the New York Society.
MR. EDWARD ROBINSON, A.B., *Boston*, of the Boston Society.
PROFESSOR THOMAS J. SHAHAN, D.D., J.U.D., *Catholic University of America*, President of the Washington Society.
PROFESSOR M. S. SLAUGHTER, Ph.D., *University of Wisconsin*, President of the Wisconsin Society.
MRS. CORNELIUS STEVENSON, Sc.D., *Philadelphia*, President of the Pennsylvania Society.
PROFESSOR FITZ GERALD TISDALL, Ph.D., *College of the City of New York*, of the New York Society.
PROFESSOR JAMES R. WHEELER, Ph.D., *Columbia University*, of the New York Society.
MRS. H. WHITMAN, *Boston*, President of the Boston Society.

**Affiliated Societies
of the Archaeological
Institute of America**

OFFICERS OF THE SOCIETIES

1898-1899

BOSTON SOCIETY

President

Mrs. H. WHITMAN.

Vice-President

PROFESSOR WILLIAM W. GOODWIN, Ph.D., LL.D., D.C.L.

Secretary

MR. ERNEST JACKSON, A.M.

Treasurer

MR. GARDINER M. LANE, A.B.

NEW YORK SOCIETY

President

PROFESSOR EDWARD DELAVAN PERRY, Ph.D.

Vice-Presidents

RT. REV. HENRY C. POTTER, S.T.D., LL.D.

MR. JULIUS SACHS, Ph.D.

MR. RUSSELL STURGIS, Ph.D.

Secretary

MR. NELSON G. MCCREA, Ph.D.

Treasurer

MR. LOUIS DWIGHT RAY, Ph.D.

BALTIMORE SOCIETY**President**

PRESIDENT DANIEL C. GILMAN, LL.D.

Vice-Presidents

MR. MENDES COHEN.

PROFESSOR BASIL L. GILDERSLEEVE, PH.D., LL.D.

MR. WILLIAM W. SPENCE.

PROFESSOR MINTON WARREN, PH.D.

Secretary

PROFESSOR KIRBY F. SMITH, PH.D.

Treasurer

MR. EDGAR G. MILLER.

PENNSYLVANIA SOCIETY**President**

MRS. CORNELIUS STEVENSON, Sc.D.

Vice-Presidents

MR. CLARENCE H. CLARK.

PROFESSOR DANIEL G. BRINTON, M.D., LL.D., Sc.D.

Secretary and Treasurer

MR. JUSTUS C. STRAWBRIDGE.

CHICAGO SOCIETY**President**

PROFESSOR WILLIAM GARDNER HALE, LL.D.

Vice-Presidents

MR. JOHN J. GLESSNER.

HON. FRANKLIN MACVEAGH.

Secretary

PROFESSOR FRANK F. ABBOTT, PH.D.

Treasurer

PROFESSOR FRANK B. TARBELL, PH.D.

DETROIT SOCIETY

President

PROFESSOR MARTIN L. D'OOGHE, Ph.D., LL.D.

Vice-Presidents

MR. CHARLES BUNCHEE.

MR. DEXTER M. FERRY.

PROFESSOR FRANCIS W. KELSEY.

Secretary

MR. GEORGE W. BATES.

Treasurer

MR. PERCY IVES.



WISCONSIN SOCIETY

President

PROFESSOR MOSES STEPHEN SLAUGHTER, Ph.D.

Vice-Presidents

MISS ALICE G. CHAPMAN.

MRS. SARAH FAIRCHILD CONOVER.

PROFESSOR ALEXANDER KERR, A.M.

MRS. WAYNE RAMSAY.

MR. BREESE J. STEVENS.

Secretary and Treasurer

PROFESSOR CHARLES FORSTER SMITH, Ph.D.



CINCINNATI SOCIETY

President

MRS. NICHOLAS LONGWORTH.

Vice-President

MR. A. HOWARD HINKLE.

Secretary and Treasurer

* MR. JULIUS DEXTER, A.B., LL.B.

* Deceased.

CLEVELAND SOCIETY**President**

MR. MALCOLM S. GREENOUGH, A.B.

Vice-President

MR. EDWARD S. PAGE.

Secretary and Treasurer

PROFESSOR HAROLD NORTH FOWLER, Ph.D.

WASHINGTON SOCIETY**President**

PROFESSOR THOMAS J. SHAHAN, D.D., J.U.D.

Vice-Presidents

PROFESSOR A. J. HUNTINGTON, Ph.D., D.D.

MISS ALICE C. FLETCHER.

Secretary and Treasurer

REV. BROTHER FABRICIAN.

NEW HAVEN SOCIETY**President**

PRESIDENT TIMOTHY DWIGHT, D.D., LL.D.

Vice-Presidents

PROFESSOR SIMEON E. BALDWIN, LL.D.

PROFESSOR BERNADOTTE PERRIN, Ph.D., LL.D.

Secretary and Treasurer

PROFESSOR HORATIO M. REYNOLDS, A.M.

American School
of Classical Studies
at Athens

MANAGING COMMITTEE

1898-1899

Chairman

PROFESSOR THOMAS DAY SEYMOUR, LL.D., of Yale University.

Secretary

PROFESSOR JAMES R. WHEELER, Ph.D., of Columbia University.

Treasurer

MR. GARDINER M. LANE, A.B., of Boston.

PROFESSOR CHARLES D. ADAMS, Ph.D., of Dartmouth College.

PROFESSOR H. M. BAIRD, D.D., LL.D., of New York University.

PROFESSOR I. T. BECKWITH, Ph.D., of the General Theological Seminary.

MISS PROFESSOR A. C. CHAPIN, A.M., of Wellesley College.

PROFESSOR EDWARD B. CLAPP, Ph.D., of the University of California.

PROFESSOR MARTIN L. D'OOGHE, Ph.D., LL.D., of the University of Michigan.

PROFESSOR EDGAR A. EMENS, A.M., of Syracuse University.

PROFESSOR ALFRED EMERSON, Ph.D. (*ex officio*, as Professor of the School), of Cornell University.

PROFESSOR O. M. FERNALD, A.M., of Williams College.

PROFESSOR ABRAHAM L. FULLER, Ph.D., of Adelbert College of Western Reserve University.

PROFESSOR HENRY GIBBONS, Ph.D., of the University of Pennsylvania.

PROFESSOR BASIL L. GILDERSLEEVE, Ph.D., LL.D., of Johns Hopkins University.

PROFESSOR WILLIAM W. GOODWIN, Ph.D., LL.D., D.C.L., of Harvard University.

PROFESSOR WILLIAM GARDNER HALE, LL.D. (*ex officio*, as Chairman of the Managing Committee of the School in Rome), of the University of Chicago.

PROFESSOR ALBERT HARKNESS, Ph.D., LL.D., of Brown University.

PROFESSOR GEORGE E. HOWES, Ph.D., of the University of Vermont.

PROFESSOR WILLIAM A. LAMBERTON, Litt.D., of the University of Pennsylvania.

MISS PROFESSOR ABBY LEACH, A.M., of Vassar College.

MISS ELLEN F. MASON, of Boston.

MRS. PRESIDENT ELIZABETH S. MEAD, A.M., of Mt. Holyoke College.

PROFESSOR CHARLES ELIOT NORTON, Litt.D., LL.D., of Harvard University.

PROFESSOR BERNADOTTE PERRIN, Ph.D., LL.D., of Yale University.

PROFESSOR EDWARD DELAVAN PERRY, Ph.D., of Columbia University.

MR. FREDERIC J. DE PEYSTER, A.M., LL.B., of New York.

PROFESSOR WILLIAM CAREY POLAND, A.M., of Brown University.

PROFESSOR RUFUS B. RICHARDSON, Ph.D. (*ex officio*, as Director of the School), of Athens.

PROFESSOR HERBERT WEIR SMYTH, Ph.D., of Bryn Mawr College.

PROFESSOR J. R. SITTLINGTON STERRETT, Ph.D., of Amherst College.

PROFESSOR FRANK B. TARBELL, Ph.D., of the University of Chicago.

PROFESSOR FITZ GERALD TISDALL, Ph.D., of the College of the City of New York.

PROFESSOR HENRY M. TYLER, A.M., of Smith College.

PROFESSOR JAMES C. VAN BENSCHOTEN, LL.D., of Wesleyan University.

PROFESSOR WILLIAM R. WARE, LL.D., of Columbia University.

PROFESSOR BENJAMIN IDE WHEELER, Ph.D., LL.D., of Cornell University.

PROFESSOR JOHN WILLIAMS WHITE, Ph.D., LL.D. (*ex officio*, as President of the Institute), of Harvard University.

PROFESSOR SAMUEL ROSS WINANS, Ph.D., of Princeton University.

PROFESSOR JOHN HENRY WRIGHT, A.M. (*ex officio*, as Editor-in-Chief of the Journal of the Institute), of Harvard University.

American School
of Classical Studies
in Rome

MANAGING COMMITTEE

1898-1899

Chairman

PROFESSOR WILLIAM GARDNER HALE, LL.D., of the University of Chicago.

Secretary

PROFESSOR SAMUEL BALL PLATNER, Ph.D., of Adelbert College of Western Reserve University.

Treasurer

MR. C. C. CUYLER, A.B., of New York.

MRS. WILLIAM F. ALLEN, of Madison.

PROFESSOR SIDNEY G. ASHMORE, L.H.D., of Union College.

PROFESSOR G. E. BARBER, A.M., of the University of Nebraska.

PROFESSOR H. J. BARTON, A.M., of the University of Illinois.

PROFESSOR CHARLES E. BENNETT, A.B., of Cornell University.

MRS. EMMONS BLAINE, of Chicago.

PROFESSOR D. BONBRIGHT, LL.D., of Northwestern University.

MR. WILLIAM H. BUCKLER, of Baltimore.

PROFESSOR HENRY F. BURTON, A.M., of the University of Rochester.

PROFESSOR J. S. CLARK, A.B., of the University of Minnesota.

RT. REV. MGR. THOMAS J. CONATY, D.D., Rector of the Catholic University of America.

MR. FREDERIC R. COUDERT, J.U.D., LL.D., of New York.

PROFESSOR W. L. COWLES, A.M., of Amherst College.

PROFESSOR A. N. CURRIER, LL.D., of the State University of Iowa.

HON. HORACE DAVIS, LL.D., of San Francisco.

PROFESSOR S. C. DERBY, A.M., of the State University of Ohio.

PROFESSOR JAMES H. DILLARD, Litt.D., of Tulane University.

RT. REV. WILLIAM C. DOANE, D.D., LL.D., Bishop of Albany.

GENERAL WILLIAM F. DRAPER, Ambassador of the United States at the Court of Italy.

PROFESSOR JAMES C. EGBERT, JR., of Columbia University.

MR. LOUIS R. EHRLICH, of Colorado Springs.

PROFESSOR ALFRED EMERSON, Ph.D., Professor in the American School of Classical Studies at Athens.

- PROFESSOR HENRY P. EMERSON, A.M., of Buffalo.
 PROFESSOR ARTHUR L. FROTHINGHAM, JR., Ph.D., of Princeton University.
 HIS EMINENCE CARDINAL JAMES GIBBONS, of Baltimore.
 MR. SAMUEL S. GREEN, A.M., of Worcester.
 PROFESSOR ALFRED GUDEMAN, Ph.D., of the University of Pennsylvania.
 PROFESSOR ALBERT G. HARKNESS, A.M., of Brown University.
 PROFESSOR SAMUEL HART, D.D., of Trinity College.
 PROFESSOR G. L. HENDRICKSON, A.B., of the University of Chicago.
 PROFESSOR CHARLES G. HERBERMANN, Ph.D., LL.D., of the College of
 the City of New York.
 PROFESSOR JOHN H. HEWITT, LL.D., of Williams College.
 RABBI EMIL G. HIRSCH, Ph.D., LL.D., of Chicago.
 PROFESSOR WILLIAM A. HOUGHTON, A.M., of Bowdoin College.
 MR. CHARLES L. HUTCHINSON, LL.D., of Chicago.
 PROFESSOR GEORGE E. JACKSON, A.M., of Washington University.
 PROFESSOR H. W. JOHNSTON, Ph.D., of the University of Indiana.
 PROFESSOR J. C. JONES, Ph.D., of the University of Missouri.
 RT. REV. J. J. KEANE, D.D., Archbishop of Damascus.
 PROFESSOR FRANCIS W. KELSEY, Ph.D., of the University of Michigan.
 CHANCELLOR J. H. KIRKLAND, Ph.D., of Vanderbilt University.
 HON. ERNEST B. KRUTTSCHNITT, A.M., of New Orleans, La.
 COMMENDATORE PROFESSORE RODOLFO LANCIANI, of the University of Rome.
 MR. GARDINER M. LANE, A.B., of Boston.
 REV. CHARLES STANLEY LESTER, D.D., of Milwaukee.
 PROFESSOR T. B. LINDSAY, Ph.D., of Boston University.
 PROFESSOR GONZALEZ LODGE, Ph.D., of Bryn Mawr College.
 PROFESSOR JOHN K. LORD, Ph.D., of Dartmouth College.
 PROFESSOR ALLAN MARQUAND, Ph.D., L.H.D., of Princeton University.
 PROFESSOR ELMER T. MERRILL, A.M., of Wesleyan University.
 PROFESSOR WILLIAM A. MERRILL, Ph.D., L.H.D., of the University of
 California.
 PROFESSOR J. LEVERETT MOORE, Ph.D., of Vassar College.
 REV. R. J. NEVIN, D.D., Rector of the American Church in Rome.
 PROFESSOR RICHARD NORTON, A.B. (*ex officio*, as Professor of the School),
 Rome, Italy.
 RT. REV. MGR. O'CONNELL, Rector of the Collegio Americano in Rome.
 PROFESSOR E. M. PEASE, Ph.D., of Leland Stanford Jr. University.
 PROFESSOR TRACY PECK, A.M. (Director of the School), of Yale University.
 PROFESSOR W. E. PETERS, LL.D., of the University of Virginia.
 PROFESSOR EDWIN POST, Ph.D., of De Pauw University.
 RT. REV. HENRY C. POTTER, D.D., LL.D., Bishop of New York.
 HON. WILLIAM POTTER, of Chestnut Hill.
 HON. J. G. SCHMIDLAPP, of Cincinnati.
 PROFESSOR EDWIN R. A. SELIGMAN, LL.B., Ph.D., of Columbia University.
 PROFESSOR THOMAS DAY SEYMOUR, LL.D. (*ex officio*, as Chairman of
 the Managing Committee of the School at Athens), of Yale University.
 PROFESSOR EDGAR S. SHUMWAY, Ph.D., of Rutgers College.
 PROFESSOR M. S. SLAUGHTER, Ph.D., of the University of Wisconsin.
 PROFESSOR FRANK SMALLEY, Ph.D., of Syracuse University.

- PROFESSOR CLEMENT L. SMITH, LL.D., of Harvard University.
PROFESSOR W. O. SPROULL, Ph.D., LL.D., L.H.D., of the University of Cincinnati.
MR. GEORGE R. STETSON, of Washington.
MRS. CORNELIUS STEVENSON, Sc.D., of Philadelphia.
MR. WALDO STORY, A.M., of Rome.
PROFESSOR LEWIS STUART, A.M., of Lake Forest University.
REV. HENRY VAN DYKE, D.D., of New York.
COMMENDATORE PROFESSORE ADOLFO VENTURI, Director-General of the National Galleries of Italy.
REV. MARVIN R. VINCENT, D.D., of the Union Theological Seminary.
PROFESSOR ARTHUR T. WALKER, A.M., of the University of Kansas.
PROFESSOR WILLIAM R. WARE, LL.D., of Columbia University.
PROFESSOR MINTON WARREN, Ph.D., of Johns Hopkins University.
HON. H. B. WENZEL, A.B., LL.B., of St. Paul.
PROFESSOR ANDREW F. WEST, Ph.D., of Princeton University.
PROFESSOR JAMES R. WHEELER, Ph.D., of Columbia University.
PROFESSOR JOHN WILLIAMS WHITE, Ph.D., LL.D. (*ex officio*, as President of the Institute), of Harvard University.
VICE-CHANCELLOR B. L. WIGGINS, A.M., of the University of the South.
PROFESSOR JOHN HENRY WRIGHT, A.M. (*ex officio*, as Editor-in-Chief of the Journal of the Institute), of Harvard University.

Archaeological
Institute
of America

FOREIGN HONORARY MEMBERS

PROFESSOR ALEXANDER CONZE, Ph.D., *German Imperial Archaeological Institute, Berlin.*

MR. GEORGE DENNIS, D.C.L., *London.*

PROFESSOR WILHELM DÖRPFELD, Ph.D., LL.D., *German Imperial Archaeological Institute, Athens.*

PROFESSOR PERCY GARDNER, Litt.D., *University of Oxford.*

PROFESSOR R. C. JEBB, Litt.D., D.C.L., LL.D., M.P., *University of Cambridge.*

PROFESSOR GASTON MASPERO, D.C.L., *Collège de France, Paris.*

PROFESSOR THEODOR MOMMSEN, Ph.D., J.U.D., *University of Berlin.*

THE IDENTIFICATION OF THE MARBLES USED IN GREEK SCULPTURE

IN the science of archaeology, the determination of the provenance of the various objects which form part of its subject-matter, is of the highest importance. Other considerations apart, the knowledge of the place of origin of a given piece of sculpture, or even of the source whence its material is derived, may furnish us with a clue to the sculptor or school which produced it. In the case of marble sculpture, especially, the opinion is commonly held that, from examination of the material, fairly trustworthy conclusions may be drawn as to its source.

In talking the matter over recently with an archaeological friend,¹ it was suggested to me, who, though a petrologist, have taken, and still take, much interest in archaeological matters, that it would be of value to explain to archaeologists, who, it may be assumed, know little or nothing of petrography, the principles on which such conclusions rest, the methods of examination of a given specimen, and how great a degree of confidence may be placed in the identification of the source of the material of a statue. I shall confine myself to the marbles, both on account of their importance as artistic material, and because a discussion of them will elucidate many of the principles involved.

This discussion seems the more called for since it is the opinion of some archaeologists, in which the writer concurs,

¹ Mr. Edward Robinson, to whom I am indebted, as well as to Professors J. R. Wheeler and F. B. Tarbell, for kindly advice and criticism.

American Journal of Archaeology, Second Series. Journal of the
Archaeological Institute of America, Vol. II (1898), Nos. 1, 2.

that too much confidence has been placed in such identifications. These have, in nearly all cases (with the exception of Lepsius's work), been made with no adequate knowledge of the facts or methods necessary for correct judgment, and, in certain instances, have led to the holding of diametrically opposed views by leading authorities, as in the cases of a Satyr in the Louvre,¹ and the Medici Torso² in the *École des Beaux Arts*.

By far the most important work which has been done that aims at the identification of the localities of marbles by means of scientific methods, is that of Lepsius.³ In this he discusses the marbles of Greek quarries and of the sculptures in the Athenian and other Greek museums, from a petrographical standpoint, and his paper has deservedly had great influence with all archaeologists. But, while I cannot speak with the authority of Dr. Lepsius, who had many opportunities for the study of Greek marbles and made excellent use of them, and while I recognize the high character of his work and its utility if judiciously applied, yet it seems to me that too much stress has been laid on this work in applying similar ideas elsewhere, and that general conclusions have been drawn by others which are not warranted by the facts, or by the principles involved. Archaeologists, either forgetting or not knowing the detailed character of the work done by Lepsius, and the necessity of such work for these investigations, have been inclined to use a rule of thumb method in dealing with the place of origin of marbles. To state the case broadly, any large-grained, highly translucent marble is put down as Parian, or, at least, Island marble; one that is finer grained but translucent, especially if weathering with a yellow tone, is called Pentelic; while a very fine-grained, snowy-white marble is called Carrara. Now it cannot be denied that such identifications may be, and often are, correct, but again—and this is the contention of this paper—they may not be, and it is

¹ Brunn, *Deutsche Rundschau*, XXXI, 1882, pp. 200 ff.; Furtwängler, *Masterpieces* (Eng. ed.), p. 330.

² Friedrichs-Wolters, *Gipsabgüsse*, 476; Furtwängler, *Intermezzi*, p. 18.

³ Lepsius, *Griechische Marmorstudien*, Berlin, 1890.

surely unscientific and unwise to act upon the assumption that one of two views is correct, when either may be.

Let us now see what marble is, that we may be in a better position to discuss the matter.

Rocks, to begin at the beginning, may be formed in one of several ways. They may result from the solidification of molten material, *e.g.* lavas, basalt, granite, and diorite. They may be formed by the deposition of water-borne sediment, and the subsequent action of hardening and consolidating processes (physical and chemical), as clay slates, sandstone, and pudding-stone, or by the consolidation of loose material, as tuffs and breccias. They may be the product of vegetable or animal growth, as coal, chalk, and limestone. Again, they may result from the precipitation of matter from solutions, as many iron ores, travertines, and vein rocks. Lastly, all of these kinds of rocks may be changed by great pressure and heat very radically both in chemical and mineralogical composition, as well as still more in physical structure. In these cases, the rock mass generally becomes more crystalline, and a laminated structure is often produced, such as we see in the schists and gneisses.

Such changes, which geologists call metamorphic, may be brought about in one of two ways. A mass of molten, igneous rock may break up through overlying beds, metamorphosing the latter, this action being due largely to the heat, as well as to certain chemical reactions which it is unnecessary to explain here. The change in these cases of local or contact metamorphism is comparatively limited in extent. The second kind, which is known as regional metamorphism, is due largely to the great heat and pressure produced during movements in the earth's crust. The earth is a cooling body, according to general belief, and, as it cools, it contracts. In the readjustment, the crust over large areas is squeezed, cracked, folded, and contorted to an extent which is almost incredible to the layman, who regards rocks as rigid bodies, incapable of being squeezed, folded, and made to flow like wax in the fingers.

Now to come back to our marbles. These are composed essentially of grains of crystalline calcite (calcium carbonate), with smaller amounts of other matter. They belong to the metamorphic rocks; *i.e.* they were not originally as we now see them, but owe their present characters to one of the two processes just described. By many observations, all over the globe, it has been well established that they were originally limestone—a non-crystalline or subcrystalline rock composed of the calcareous remains of organisms, such as molluses, corals, crinoids, or foraminifera. In many cases limestones show even to the naked eye the forms of their component organic remains, or else, as in chalk, these are easily seen with the microscope. Again, these are so much broken up by various processes, such as their mutual attrition in the water in which they lived and died, that but little remains of their organic structure. Here the rock is fine-grained and compact to the eye, and even under the microscope shows only a confused mass of small translucent grains which have little definite action on polarized light.

When, however, limestones have been subjected to metamorphic action, a striking change is observed. The more complete the metamorphism, the more the organic forms tend to disappear, and the larger and clearer become the grains, until the final product—marble—is seen to consist of interlocking grains of clear, colorless, transparent calcite. These grains are crossed by many fine straight lines and bands due to cleavage and a peculiar crystalline structure known as twinning, and they exert a strong and definite effect on polarized light. The non-calcareous portions of the limestone are also changed. In white marble the carbonaceous organic matter has been destroyed, while in the gray and black varieties, much of it is left in minute diffused particles which give the color to the mass. The other constituents have crystallized,—the iron oxide to hematite or limonite, and other substances into various minerals, as mica and garnet.

The limestones from which marbles have been made have

been formed (with some exceptions) from organic growths.¹ The molluscs, corals, etc., have flourished, died, and their remains have been broken up, year after year, at the bottom of seas, estuaries, or lakes, which were often of vast extent. Through changes in the surrounding land surface, fresh water might flow into the salt sea or estuary, or *vice versa*, the sea might be mingled with fresh lake-water, either event inducing a change in the fauna on the bottom. Or again, through freshets or the breaking away of some barrier, silt or sand might be brought down into previously clear water, destroying some organisms, and mingling its mineral constituents with the more purely calcareous remains of living beings. Such changes might alternate, or the general course of life remain uniform for long periods; but eventually the beds would be covered, hardened, and perhaps raised and changed by metamorphism into crystalline marble.

From this brief sketch several facts are evident. In the first place, deposits of marble may be found in any region where the proper conditions—organic and inorganic—have obtained. In the next place, they may vary in thickness from a few inches to thousands of feet, and in area from hundreds of square yards to hundreds of square miles. Again, these masses may be uniform throughout their extent, or they may vary in character within comparatively short distances. Again, since the organisms, or at least the substances of which their remains are composed, together with the smaller amounts of sand and silt which may be mixed with them, are much the same the world over, and since the processes by which the beds were laid and consolidated were also much the same, it is evident that we may expect to find closely similar, if not indistinguishable, rocks in different localities. We may find similar uniform beds, or we may find similar differences in the characters of near-by beds, in each place.

¹ There is still some discussion as to this, several authors considering many of the limestones to have been formed by chemical precipitation. This, however, would have no effect on the general line of argument, as will be seen.

The matter is both complicated and simplified by the influence of metamorphism. It is complicated because the results of this action are not always the same, while varying between rather narrow limits in the case of the rocks under discussion. These depend on many conditions, such as the amount of pressure, the thickness and size of the beds, their geological position, temperature, presence or absence of water, etc. In the case of local metamorphism, the limestone is more and more marmorized the nearer we approach the igneous centre, so that near this mass we may get a perfectly crystalline, statuary marble, while a short distance away the rock may preserve the indeterminate character of limestone. In regional metamorphism, also, parts of the mass may be much more altered than others, as is well seen, for instance, in the Vermont marble region. But these varying conditions of metamorphism are, like the varying conditions of deposition, much the same the world over; none of them are peculiar to Greece, Italy, or any other region, so that they do not invalidate in the least the general conclusion of the last paragraph, that similar rocks are to be expected in different localities.

But, on the other hand, metamorphism also simplifies the matter. Its tendency, at least in the case of marbles, is to obliterate original differences.¹ The definite and easily recognized forms of the organic remains and the bedded structure become lost in marble in a mass of irregular calcite grains. Where, before, the palaeontologist could have determined the genera and species of the individuals nothing is left but clear, colorless, angular particles and grains. Occasionally evidences of the bedding are to be traced in layers of micaceous material, which give a tendency to the marble to split along definite planes, as is seen in some Pentelic marbles, and in such varieties as the Carystian used for the columns of the temple of Antoninus and Faustina in Rome. But even these are much con-

¹ This tendency is well exemplified in other metamorphic rocks, as schists and gneisses, where, in many cases, it is impossible to determine whether the original rock was igneous or sedimentary.

torted, and are often due to pressure and not to bedding. This tendency towards homogeneity is unfortunate for the purposes of the archaeologist, because since each region has its own fairly well defined and peculiar fauna, if their remains were preserved, the palaeontologist would be of immense assistance in determining provenance.

But there is still another factor making for uniformity, one already briefly noted, but which should be emphasized. This is the simplicity of the chemical composition of limestones and of their successors, the marbles. They are essentially carbonate of lime, occasionally with notable quantities of carbonate of magnesia, but with other substances, as silica, alumina, and oxides of iron, in comparatively small amount. This is especially true of statuary marbles, which are all nearly chemically pure calcium carbonate.

The above considerations, it is true, are generally applicable to marbles, but, it must be remarked that we do find instances of marbles from certain localities which have no known analogues, and whose provenance can be predicated with a fair degree of safety. These are the colored and "fancy" marbles. With the great differences of color and of brecciated or veined structure which these present, there is an almost infinite number of recognizable varieties, and in these cases we are not left in much doubt as to where the block in question was quarried, if we know where quarries furnishing such rock exist, or above all, if we know that such quarries were worked in antiquity. But these marbles are exceptional, and only in comparatively late and unimportant periods of art were used for sculpture. Their use was mainly architectural, and with such material we have little to do here.

Coming back to statuary marbles we see that the field has been greatly narrowed. It is evident that *a priori* we may expect to meet with identical marbles coming from diverse localities. It may be urged, however, that possibly there are differences, slight indeed, but still discernible, which will enable us to distinguish between two marbles—say a Pentelic and a

Parian. From the simplicity of chemical and mineralogical composition the possibility of distinctive chemical¹ and mineralogical² differences may be dismissed at the outset, and we have to fall back on physical differences. From what has preceded it is manifest that such differences in statuary marbles will be small, even between extreme types; to the naked eye a difference in the size or translucency of grain, both within very narrow limits, slight differences in the manner of weathering, a difference in the tone, whether a slightly bluish or a yellowish white, and such small matters.

It soon becomes evident to any one examining marbles from this point of view, if he is not satisfied with haphazard guesses (for many of the so-called identifications deserve no better name), that some means must be employed which will enable us to study the minuter characters of the specimen. This means is furnished us by the microscope and the methods of modern petrography, which may be briefly described before we touch upon what they reveal to us and discuss the identificatory value of the revelations.

In order to study a rock under the microscope, it is necessary, not merely to polish one surface, but to employ a slice, or section, made as thin as possible, in order that light may be transmitted through it. This is accomplished by grinding down flat chips on both sides, by means of emery, first on iron plates or wheels, and then on glass, and finally mounting with Canada balsam on glass slides. The process is laborious and requires considerable manual dexterity; but when successful, the resulting rock section is not more than two or three hundredths of a millimetre in thickness, and, except for opaque

¹ Lepsius (*op. cit.* p. 18) states that Pentelic marble is distinguished from all other Greek marbles through its content of iron oxide—his analysis showing 0.12 per cent. On p. 33, however, he states that the Dolianá marble has the same amount as Pentelic. The coincidence of figures is, of course, pure chance, but any one acquainted with rock analyses knows that the impurities in such cases are always variable, even in the same mass, and not at all distinctive.

² Lepsius's remarks on the identificatory value of quartz grains and a bituminous odor are of interest in this connection. (*Op. cit.* pp. 18-19.) He points out that these are of no use for the purpose of identification.

minerals, is translucent, and in places transparent. In such sections powers of from thirty to one hundred diameters, which are generally used, reveal the minute structural and other characteristics, and, with the aid of polarized light, the component minerals may be definitely and accurately determined.

Now, what do we find to be the characters of various marbles when thus examined? Lepsius has described the appearance of various Greek marbles in the paper already cited, and additional details, as well as photographic reproductions, may be found in another of his works.¹ But that the archaeologist may understand the matter more fully, as well as for the sake of completeness, it may be worth while to go into the matter with some detail. To aid in the descriptions, drawings are annexed of various types of microscopic structure met with among statuary marbles; but these are necessarily crude and diagrammatic, and fail to reproduce the delicacy and detail of the originals. It must be premised, however, that these descriptions and drawings convey but very imperfect and inadequate ideas of what is seen by the eye, and it may be urged that an hour spent in looking over the sections of marble and limestone of some geological or petrographical *confrère* will be amply repaid, by giving one a just idea of the possibilities and limitations incident to such an investigation.

Let us begin with the most crystalline marble, such as the best Parian (Fig. 1). This is wholly composed of fairly uniform grains of clear, colorless calcite, which average 1 mm. to 2 mm. in diameter, though a few run up to 3 mm. and even 5 mm. The grains are of irregular shape, and definite, straight-edged crystal outlines are wanting. They "inter-lock," *i.e.* they abut against each other closely, leaving no vacant space, and the projections and concavities of one grain fit snugly into corresponding concavities and projections of the adjacent grains. This is what is called a uniform, granular structure, and might be compared with polygonal masonry laid

¹ Lepsius, *Geologie von Attika*, Berlin, 1893.



FIGURE 1. — PARIAN MARBLE. *Ordinary Light.* $\times 20$.



FIGURE 2. — PARIAN MARBLE. *Polarized Light.*

without mortar. In the best "lychnites" the grains of calcite are free from impurity, but in the poorer kinds of Parian marble they include small specks of dark iron ore and other substances, the total amount of these being very small. The calcite grains are traversed by fine straight lines, due to cleavage (splitting) along certain planes, and in polarized light are seen to be divided into parallel light and dark bands,—the twinned structure already mentioned,—both of these being largely due to the pressure causing the metamorphism. If the sections are of the proper tenuity, brilliant colors are seen in polarized light; but in general the sections are not thin enough, and the colors are shades of bright gray (Fig. 2).

In the next figure (Fig. 3) we see a section of Lower Pentelic marble. This shows also some large, clear grains, together with smaller, less clear ones. But these last are not arranged in streaks, but are scattered more or less uniformly among the larger ones, thus breaking up the light, and giving to Pentelic marble its whiter color and less degree of transparency as compared with Parian. This structure might be roughly compared with polygonal masonry, with small stones fitted in the crevices between the larger.

In another example (Fig. 4) we find much the same thing, only here the large, clear grains are few and scattered widely through a mosaic of small ones, the structure being what is called porphyritic.

In the finest-grained marbles we find the large calcites fewer still in number and the fine-grained mosaic largely preponderating, until in the limestones proper we get only a confused aggregate of minute grains of calcite, showing no cleavage or twinning, and with impurities much more abundant. In the less changed limestones, finally, we see the actual organic remains embedded in a fine calcareous mud.

It must be remarked that the types figured here are extreme, or rather distinctive of several of the prominent structures met with. They are not separated in nature as sharply as might be supposed from the few and distinct examples given, but grade

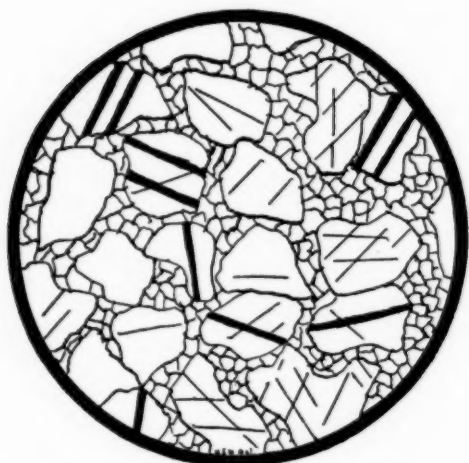


FIGURE 3.—PENTELIC MARBLE. *Ordinary Light.* $\times 20$.



FIGURE 4.—MARBLE OF PORPHYRITIC STRUCTURE. *Ordinary Light.* $\times 20$.

into one another, often in the same rock mass, through innumerable and diverse transition forms.

From the above description, however inadequate, the reader will gather that the physical differences between one marble and another are neither very great nor very distinctive. It is evident also that they are not fundamental, but are due to the variation of conditions in intensity or degree rather than in kind, when we find that these structures are not separable into hard and fast groups, but grade into one another. This is true whether we examine many specimens from various localities, or suites of specimens from the same mass. The greater part of Parian marble belongs to the first-described type, but some marbles from Paros, according to Lepsius, possess other characters. At the quarries of Mt. Pentelicus, most of the marble is of a structure similar to that shown in Fig. 3, but here again we find in places coarse-grained varieties which much resemble some Parian.¹

But the characters of any marble are not peculiar to itself or to the locality,—no marble is *sui generis*,—but they all may be, and in many cases demonstrably are, the characteristics of marbles from other localities. This is the keynote of this paper, and the basis on which I put in a plea for greater caution in our methods and judgments when dealing with this question. We are not dealing here with the products of human activity or human intelligence, so infinitely varied, each with its own individuality and capacity of impressing some of its marks on its followers; nor with fauna and flora, distinctive of the region which has produced them through the manifold and complex conditions of their existence; but we are dealing with inanimate masses, among the simplest of the rocks of the globe, whose characters vary only within narrow limits, and which are the products of comparatively few and simple forces and conditions that duplicate themselves at times and in many places.

It is a matter of very great regret to me that I cannot, at present, bring before the reader any specific instances to clinch

¹ Lepsius, *Marmorstudien*, p. 16.

the matter ; cases where, for instance, marbles from two widely distant localities are identical and indistinguishable the one from the other. As I do not possess an adequate collection of material illustrating the subject, I can only discuss the matter from general geological principles. These, it is true, would naturally not appeal to the archaeologist as strongly as to the geologist, and are, therefore, less convincing than the citation of specific instances would be. In so far as this is true, my object is unattained ; but, that archaeologists may judge for themselves of the weight of such general principles, I may cite an instance in the domain of petrography outside of marbles.

This, the most striking which has come to my notice, and one which has an important archaeological and ethnological bearing, is the investigation by Clarke and Merrill¹ of objects of jadeite and nephrite in the United States National Museum. The examinations were made both chemically and petrographically on a rich variety of objects from Alaska, Mexico, Central America, Siberia, Switzerland, New Zealand, and other places. They found that, both chemically and mineralogically, nephrites from Alaska, Switzerland, New Zealand, New Caledonia, and Siberia were practically indistinguishable, and the same held good for jadeite from Mexico, Costa Rica, and Burmah. Their conclusions, as far as they relate to the subject under discussion, are worthy of being quoted in full :²

“ As regards the possibility of distinguishing by means of thin sections and the microscope between nephrites from various sources, a majority of the authorities consulted (and among them are those who have devoted much time to the subject, and who, having critically examined a large number of slides, are capable of rendering opinions of value) appear to favor the view that this is practicable. As for ourselves, with our present experience, we confess to a feeling of scepticism. The presence or absence of enclosures of diopside, magnetite, or ferru-

¹ Clarke and Merrill, ‘On Nephrite and Jadeite,’ *Proc. U. S. Nat. Mus.*, 1888, p. 115.

² Clarke and Merrill, *op. cit.* p. 129.

ginous oxides, the condition of these oxides, whether ferric or ferrous, the varying tufted, bent, confused fibrous and even granular condition of the constituent parts, are all, together with the color variations and other structural peculiarities, matters of too slight import to be of weight from a petrographic standpoint. If, as seems possible, the majority of the nephrites are of secondary origin, why may we not expect to find all, or at least a great variety, of the structures described in the same or closely adjacent rock masses? Chemical analysis on samples from near-lying, or even the same, localities are often found to vary as greatly as those from localities widely separated. Why may we not expect the same structural variations when once they are carefully looked for? To our own minds sufficient assurance that the widely scattered jadeite and nephrite objects were derived from many independent sources, and possess no value whatever in the work of tracing the migration and intercommunication of races, lies in the fact that these substances are comparatively common constituents of metamorphic rocks, and hence liable to be found anywhere where these rocks occur. Their presence is as meaningless as would be the finding of a piece of graphite. The natives required a hard, tough substance capable of receiving and retaining a sharp edge and polish, and took it wherever it was to be found."

Another example, in the writer's experience, is that of certain lavas of Aegina and Methana, which so closely resemble some of those from our western states that it is practically impossible to tell them apart, even by the microscope. Indeed, many instances of the sort might be given, and so generally is this recognized that only in exceptional cases would a petrographer venture to name the locality of a given specimen of rock.

In the foregoing pages the subject has been treated in a general way, and the conclusion is that, speaking broadly, no very positive or trustworthy information as to source can be obtained from the examination of the material of sculptures. But there is another and less general aspect, the consideration of which must not be neglected.

In dealing with the works of art of any ancient peoples, such as the Greeks and Romans, our horizon is notably contracted by several considerations. In the first place, the possible number of localities of material is limited by the geographical extensions of these races, and their connections, commercial and military. In the next place, we can assume as natural that for most works of art suitable material from near-by localities would be used rather than from those at a distance. This would hold true especially of the less important objects and of the more humble artists. A third and important consideration is that certain marbles, — often more fashionable, — as *par excellence* the Parian, were favorites with sculptors, who would use these, even if they had to be imported at considerable expense, in preference to marbles nearer to hand.

In examining, then, the material of any given statue, with the object of determining whence the material was derived, all these facts must be taken into consideration. The known facts as to the provenance of the statue itself would have great influence on our conclusions and their probable correctness.

If we are dealing, as Lepsius was, with works of art largely of no great importance at the time of their creation, and nearly all from localities in the neighborhood of extensively worked quarries, the problem is greatly simplified, and our conclusions fairly trustworthy. If the characters of the marbles of the Attic tomb reliefs agree with those of the known Pentelic quarries, or that of many of the archaic female figures of the Acropolis with that of Paros, or that of the pediment figures from the temple of Athena Alea with that of the ancient quarries at Dolianá, we can feel reasonably safe in drawing the conclusion that these works were made of marble from these quarries. They are the natural sources in each case, and if the characters agree, our chain of reasoning is strong, though by no means perfect.

But it is a different matter when we are dealing with statues of unknown ultimate provenance, (as is the case with the majority of the sculptures in the European museums out-

side of Greece,) or from localities in the neighborhood of which no white marble is quarried. For instance, in the case of the Satyr of the Louvre already cited (page 2), which was found on the Palatine, are we justified in asserting with Brunn that it is Parian, or with Furtwängler that it is "possibly Thasian, but certainly not Parian"? Again, Furtwängler is, according to the views expressed above, expressing himself more strongly than the facts warrant, when he says of the Medici Torso,¹ "Zunächst ist der Marmor nicht . . . carrarisch, sondern, wie schon Bötticher und Michaelis sahen, pentelisch, und zwar sind die Eigenschaften des pentelischen Marmors an vielen Stellen *so unverkennbar*, dass nach dieser Richtung *gar kein Zweifel mehr bestehen kann*. Es ist ein gewaltiger, ausgesucht schöner Block pentelischen Materiales."

No information is given by any of these authorities which leads us to believe that any examination other than a superficial one was made of the material, and the fact is that in such cases we are launched on a sea of conjecture, where the petrographer is of little use to the archaeologist. On the one hand we have the known facts that certain marbles were highly prized and most used by the ancients, and also often that the characters of the material of our statue agree — at least superficially — with those of one of the well-known varieties. On the other hand, we know that many other districts than Paros, Mt. Pentelicus, Carrara, etc., furnished marbles which were also used to a certain (and generally unknown) extent — at least locally. Some of these localities we know, while of others we are absolutely ignorant. Furthermore, the examination of Greek and Roman statues, from this point of view, has never been, with the exception of Lepsius's work, of such a character as to justify any confidence in its results; and lastly, even were such difficult, tedious, and minute examinations made in each case by specialists, they would furnish us with little safe basis for argument, for the reasons set forth in the preceding pages.

The outcome of the present discussion, then, is, that all argu-

¹ Furtwängler, *Intermezzi*, p. 18. The italics are mine.

ments based on the evidence furnished by examination of the material of sculptures should be received with the greatest caution. Such evidence should only be produced after careful petrographical examination and comparison both of the sculpture itself and of all the possible quarries available whence such marble might come. Its value at best, even in such cases as those of the Attic tomb reliefs or the Tegean pediment figures, is but corroborative of the evidence of style, technique, etc., which furnish the safest basis on which to build arguments as to the provenance of the finished object. The importance and reliability of these grow with the increase of our knowledge, while, unfortunately, as our knowledge of the ancient marbles and their quarries increases, just so much does the uncertainty of our deductions therefrom increase.

HENRY S. WASHINGTON.

LOCUST, N.J.

American School
of Classical Studies
in Rome

A CAPITAL FROM THE TEMPLE OF JUPITER
CAPITOLINUS IN ROME

THE temple of Jupiter Capitolinus, an imposing ruin in the Middle Ages, later so completely disappeared from view that its very site was forgotten. To-day, however, the materials are being gradually recovered to enable us to picture the building to our imagination. Citations from classical authors, images on coins, sculptured reliefs, and sketches of reliefs now lost have been used to fill out the picture. Any fragment, therefore, that can be identified as belonging to the temple itself has special interest.

The first important identification was that of the substructure. In 1865 portions of ancient walls were discovered in the Caffarelli gardens by the Prussian minister Herr Schlözer and published by Comm. Rosa,¹ but the significance and importance of the discovery was not then properly understood. The excavations of 1875 and 1876, as interpreted by Lanciani and Jordan, established beyond a doubt that these walls constituted part of the substructure of the famous temple of Jupiter Capitolinus. Their Etruscan character is highly probable, since they are composed of local tufa blocks measuring about 0.32 m. × 0.60 m. × 0.70 m., and are set with "headers" and "stretchers" in alternate horizontal layers. Enough remains to show that they carried a triple row of columns for the *pronaos* and a row of columns for each of the *pteronata*. These substructures seem to date from the earliest foundation of the temple by the Tarquins and to have served the same purpose through the

¹ *Annali*, 1865, p. 382; *Mon. d. Inst.* VIII, tav. xxiii, 2.

American Journal of Archaeology, Second Series. Journal of the
Archaeological Institute of America, Vol. II (1898), Nos. 1, 2.

successive restorations by Sulla, Augustus, Vespasian, and Domitian.

While of the substructure no inconsiderable portion still remains, the superstructure has disappeared and its place is occupied by the palace and gardens of the German Embassy. Possibly the palace walls contain much that survived the ravage of fire and the assaults of the Vandals. But what has become of the marble columns and entablature? The lime-



FIGURE 1. — STYLOBATE OF THE TEMPLE OF JUPITER CAPITOLINUS.

kiln, the marble-yard, and the sculptor's atelier may be to a large extent responsible for their disappearance, but it is not improbable that the Capitol hill itself and its surroundings still conceal important fragments. The means of reconstructing the columns, however, is already near at hand. A fragment of the base of one of these columns was recovered in the excavation of 1875 and placed in the garden of the German Institute.¹ It is unfortunately no longer there. Professor Petersen in-

¹ Jordan, *Topographie der Stadt Rom*, I, ii, p. 72, note 69.

formed me that it had been presented to the municipal government of Rome, but where it is at present I have been unable to discover. It is described as an Attic base, the form usually employed by the Romans for columns of the Ionic and Corinthian order. According to Professor Hülsen's recollection, this fragment exhibited little more than one torus and scotia. It was said to be of Pentelic marble. In the form of the mouldings we cannot be far wrong in assuming that this base differed little from the bases of the columns of the Temple of Vespasian.¹

Fragments of huge shafts of columns were discovered in the Caffarelli Gardens on November 7, 1875, and still exist in the small court behind the Sala Rotonda of the Conservatori Museum. The largest fragment is embedded in the wall which separates the Conservatori court from the German Embassy. It is of a fine Pentelic marble, white mottled with violet. The preservation of the shaft is not such as to make very exact measurements possible. The channellings, as well as I could judge, measure 0.180 m. in width; the arrises can be measured more exactly and are 0.045 m. wide. Thus the channellings, from centre to centre, measure 0.225 m. This is one centimetre less than the measurements taken by the architect Schupmann² in 1876. Assuming that the shaft had twenty-four channellings, its circumference at this point would be 5.40 m.; in other words, this drum of the shaft has at this point a diameter of about 1.72 m.

On March 12, 1897, the workmen who were engaged on the new road or pathway to the Via di Monte Tarpeo uncovered a fragment of an immense Corinthian capital. It was discovered in front of the new stables of the German Embassy, across the Via di Monte Tarpeo, directly opposite the doorway marked No. 32. It lay a little below the surface on the edge of the cliff, but had not rolled down. The place where the fragment was discovered was only a few yards from the platform of the Temple of Jupiter Capitolinus. The

¹ See Figure 3.

² *Annali*, 1876, p. 151.

material of the fragment is a fine Pentelic marble, now covered with a rust-colored patina. Owing to this covering I could not discover any of the violet veins which characterized the marble of the shaft. That the marble is Pentelic is an opinion shared also by Professor Lanciani and by Cav. Apollonj, the sculptor, who has a thorough knowledge of Greek and Italian marbles. The character of the marble points to a connection with the base and shaft, already noted, which have, on this ground mainly, been identified with the Pentelic columns of



FIGURE 2. — FRAGMENT OF A CORINTHIAN CAPITAL.

the final restoration of the temple by Domitian.¹ It is usually assumed that only Domitian's temple had columns of this quality of marble, whereas this is not a necessary conclusion from Plutarch's statement. In fact, if there be any foundation for the tradition of Sulla's having transported from Athens a column from the Temple of Zeus Olympius, the earliest as well as the latest restoration of the Temple of Jupiter may have been of Pentelic marble. It is, however, possible that Augustus or Vespasian used marble of some other

¹ Plutarch, *Poplic.* 15: οἱ κίονες ἐκ τοῦ Πεντελῆσιν ἐτμήθησαν λίθου, κάλλιστα τῷ πάχει πρὸς τὸ μῆκος ἔχοντες· εἶδομεν γὰρ αὐτοὺς Ἀθήνησιν.

sort. We naturally think of Carrara marble in this connection, for the native quarries began to be extensively used in the time of Augustus, and the employment of Greek marble by Domitian seems to have impressed Plutarch as a fact worthy of notice. There is still another supposition. Parian marble was extensively imported in the early Empire; in fact, the large fragments of a beautifully decorated architrave and of a cornice, which still lie on the Capitoline hill along the Via delle Tre Pile, are of Parian marble. Possibly the columns of the restoration by Augustus or Vespasian were of Parian marble. In any event, the fact that the fragment of a capital recently discovered is of Pentelic marble identifies it probably, though not necessarily, as belonging to Domitian's temple.

That this capital belonged to the Temple of Jupiter is substantiated not only by the site of the discovery and the quality of the marble, but also by its size, which is much too large for the columns of the other temples of the Capitol, but well suits shafts of this temple. The *calathus* or basket-like kernel of this capital has a diameter of 1.54 m. Measured from the surface of the lily in front to the surface of the lily on the opposite side of the capital, the diameter is 1.74 m. The upper diameter of the shaft cannot vary much in either direction from the diameter of the *calathus* of the capital. Now the fragment of a shaft in the Conservatori courtyard has, according to our calculation, a diameter of 1.72 m., and was therefore, in all probability, not a portion of the extreme summit of the shaft. If we assume, therefore, that the upper diameter of the shaft measures about 1.54 m., then the lower diameter would be about 1.84 m. That this was approximately the size of the lower diameter of the shaft might also be inferred from the calculated diameter of the base. Jordan informs us¹ that an architect estimated the base as having a diameter of 2.26 m. If we assume this to be the diameter of the upper torus, then the lower diameter of the column would be about 1.89 m. So we may infer that the fragment of the base was probably a

¹ *Topog.* I, ii, p. 72, note 69.

fragment of the upper torus, and that the fragment of a shaft in the Conservatori court was not from the summit, though from above the middle of the shaft. The total height of the column may be calculated as 18.211 m., divided as follows :

Height of base (including plinth)	= 0.981 m.
Height of shaft	= 15.057 m.
Height of capital	= 2.173 m.

These dimensions we have derived from the lower diameter by assuming that the proportions of the column were similar to those of the Temple of Vespasian, the dimensions of which are given by Taylor and Creasy, *Architectural Antiquities of Rome*,¹ Vol. II, Plates lxxix-lxxxiii. The height of the fragment of the capital is about 0.63 m. If we assume that this represents from a third to a quarter of the total height of the capital, we should reach a similar estimate for the total height of the capital.

We have to consider, finally, the style of the capital. The acanthus leaves are so damaged as to give us little aid. The chief point of comparison is the lily or lotus flower that forms the central decoration. This is blocked out with great simplicity. Similar simplicity of outline and modelling of the lily will hardly be found in any Corinthian capital in Rome, except in the capitals of the Temple of Vespasian. This temple was erected to Vespasian by his son Domitian, and its columns and entablature seem to have undergone little alteration when the temple was restored by Severus and Caracalla.

We may, therefore, regard the capitals of Domitian's temple to Vespasian as our standard and guide for reconstructing the capitals of his Temple to Jupiter Capitolinus. What is more natural than that Domitian should have employed the same architect in each case?

In the drawing known as Ursinianus Vaticanus 3439 f. 83, published by Hülsen,² a corner capital of the temple of Jupiter is figured as having an eagle perched upon it. This device we meet with in all the capitals of the Portico of Octavia, and it

¹ From this work (Vol. II, pl. lxxx1) is taken our Figure 3.

² *Röm. Mitth.*, 1880, p. 251.

seems possible that an architect of the time of Augustus may have introduced it here also as peculiarly appropriate to the temple of Jupiter. But the fragment of a capital discovered in March enables us to say that in Domitian's restoration an

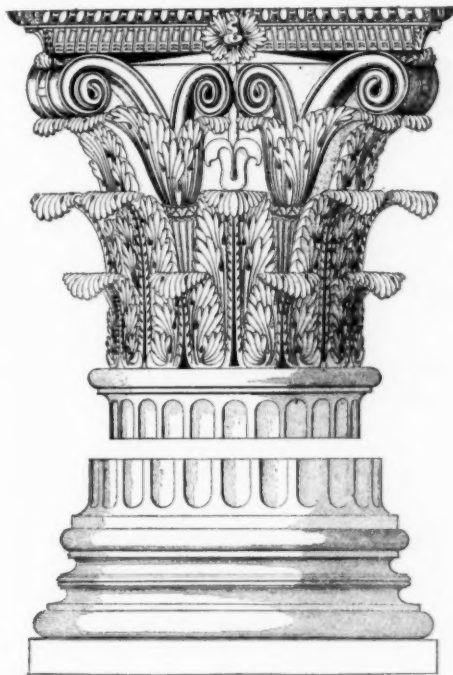


FIGURE 3. — CAPITAL OF THE TEMPLE OF VESPASIAN.

eagle could only have been retained in the corner capitals; it could not have figured on the front of a capital as it would have obliterated the central lily. The capitals, therefore, in all probability varied little in style from those of the Temple of Vespasian.

ALLAN MARQUAND.

American School
of Classical Studies
in Rome

THE EPIGRAPHIC SOURCES OF SUETONIUS

No one has hitherto undertaken a thorough investigation in regard to the extent to which the ancient Roman historians made use of epigraphical monuments.¹ Of those who have written on the sources of Suetonius, Maffei² has given some attention to the inscriptions actually occurring in the text; Schweiger³ has merely mentioned the Monumentum Ancyranum (p. 13), the Fasti (p. 19), and the public monuments (pp. 24, 26); Krause⁴ refers only in a general way to the Fasti, acta publica, monumenta (pp. 29, 30, 35, 42, 53-55, 58, 75), and to the Monumentum Ancyranum, which, he remarks, Suetonius "summa cum diligentia consuluit"; H. Lehmann⁵ treats briefly of the epigraphical sources of Suetonius with special reference to the Monumentum Ancyranum; likewise Egger in a discussion of the historians of the time of Augustus⁶ (pp. 270-272), Baumgarten-Crusius in his edition of Suetonius⁷ (III, p. 714 f.), and Roth in his edition of Suetonius (p. xv).

Inscriptions are rightly regarded by modern historians as affording invaluable evidence for the understanding of ancient life and the unravelling of ancient history. This is apparent to one familiar with the works of Th. Mommsen, for example, who in this field is easily *doctorum princeps*. Ancient histo-

¹ Cf. Hübner's remark in Ivan v. Müller's *Handbuch*, I, p. 628 (An.).

² *Ars critica Lapid.* lib. II, cap. II, pp. 43 f.

³ *De fontibus atque auctoritate citarum XII Imperatorum Suetonii*, Göttingen, 1830.

⁴ *De C. Suetonii Tranquilli fontibus et auctoritate*, Berlin, 1831.

⁵ *Claudius und Nero und ihre Zeit*, Gotha, 1858, pp. 50-53.

⁶ *Examen des historiens anciens du règne d'Auguste*, Paris, 1844.

⁷ Published at Turin, 1823-26.

rians, as well, were able to avail themselves of the evidence of inscriptions if they chose to do so, though in the time of Suetonius the extant documentary evidence was doubtless more abundant and more easily accessible.

In the first place, an examination of the text of Suetonius will be helpful in determining how communicative the historian is, in general, with regard to the sources from which he drew.

There are many passages that refer in a general way to the source, e.g. *scribunt quidam* (Aug. 15); *ut quidam putant* (Tib. 9, Cal. 23); *ut plurimi tradant* (Cal. 4); *ut multi opinantur* (Otho 9); *a nonnullis . . . proditum* (Aug. 3); *ex nonnullis comperi* (Nero 29); *iactatum a quibusdam* (Vesp. 16); *constans opinio est* (Caes. 50); *alii tradunt* (Cal. 25); *originem alii aliam tradunt* (Vit. 1); *sunt qui putent . . . alii opinantur* (Caes. 86); *quidam tradunt . . . ; alii . . . diversa fama est. Multi . . . aiunt. Nonnulli . . .* (Claud. 44); *nec tamen desunt qui . . . scribant* (Tib. 5), etc.

Frequently, remarks of different emperors¹ are quoted directly, in extracts that Suetonius presumably took from literary sources, e.g. *Etiam nunc regredi possumus; quod si ponticulum transierimus, omnia armis agenda erunt* (Caes. 31); *Quintili Vare, legiones redde!* (Aug. 23); *Ipsius verba sunt: Dum veniam ad id tempus, quo vobis aequum possit videri dare vos aliquam senectuti meae requiem* (Tib. 24); (*ut ipse dicebat*) ἀξιοθρι-ἀμβετρον (Cal. 47). Other direct quotations are to be found in Aug. 51, 99, Tib. 28, Claud. 16, Nero 49, Vesp. 8; and of unknown authorship, Aug. 26, Cal. 8. Quotations of this character are very numerous. There are, for example, in the life of Augustus, nineteen direct quotations, of which fourteen are from the emperor himself; in the life of Tiberius, there are thirteen, nine being from Tiberius and one from Augustus. These quotations are now in verse, now in prose, sometimes in Latin, and again in Greek.

Many passages quote, occasionally directly, more often in

¹ Cf. Shuckburgh, *C. Suetoni Tranquilli Divus Augustus*, Cambridge, 1896, pp. xxxi f.

indirect discourse, from writers and historians, some of whom are obscure, others well known. Of those who are not known to us from other sources, or whose writings have entirely or almost entirely perished, may be mentioned Aquilius Niger (*Aug.* 11), Iunius Saturninus (*Aug.* 27), C. Drusus (*Aug.* 94), Iulius Marathus (*Aug.* 79, 94), Cordus Cremutius (*Aug.* 35), Cassius Severus (*Vit.* 2), Tanusius Geminus (*Caes.* 9), M. Actorius Naso (*Caes.* 9, 52), Titus Ampius (*Caes.* 77). Well-known authors quoted are Cicero, — *de Officiis* (*Caes.* 30), *Epist.* (*Caes.* 49, *Aug.* 3), *ad Brutum* (*Caes.* 55, 56), three quotations being without definite reference to his works (*Caes.* 42, 50, *Aug.* 94); Cornelius Nepos (*Aug.* 77); M. Antonius (*Caes.* 52, *Aug.* 2, 4, 7, 10, 16, 63, 68, 69, 70); Asinius Pollio (*Caes.* 55, 56); Hirtius (*Caes.* 56); Plinius Secundus (*Cal.* 8).

Suetonius made much use of the letters of the emperors in writing the history of their lives. The letters of Augustus are quoted *orat. rect.* fourteen times,¹ several times at length. Some peculiarities² in Augustus's handwriting and language are noted by the historian (*Aug.* 87, 88). So, too, in the case of the letters of Caesar, Tiberius, Caligula, Nero, and Domitian, extracts³ are made or peculiarities noted. But Suetonius was familiar with different books and pamphlets published by the Caesars, as well as with their correspondence. He quotes a *laudatio* delivered by Iulius Caesar (*Caes.* 6), mentions other works of his (*Caes.* 26), and discusses his Commentaries and their authorship (*Caes.* 56); he quotes directly an edict of Augustus (*Aug.* 28), and was acquainted with five of his works (*Aug.* 85); he made an extract from the autobiography of Tiberius (*Tib.* 61); used the histories written by Claudius (*Claud.* 21), as well as a certain pamphlet of his (*ibid.* 2), some orations (*ibid.* 38), and others of Claudius's works (*ibid.* 33, 38, 41, 42); he was familiar with a *carmen* written by Nero (*Nero*,

¹ *Aug.* 51, 71 (3), 76 (3), 86, 92; *Tib.* 21; *Cal.* 8; *Claud.* 4 (3).

² See below (p. 44), where passages are quoted proving that Suetonius had access to autograph letters of Augustus.

³ *Caes.* 26, 56; *Tib.* 67; *Cal.* 23; *Nero*, 23, 41; *Dom.* 13.

24); and he mentions a history composed by the grandfather of Galba as *multiplícem nec incuriosam* (Galba, 3).

Mention is made also of the *acta publica* and *acta diurna* (Tib. 5, Cal. 8, Claud. 41), as sources of information, and of the *acta senatus*¹ (Aug. 5). A part of Aug. 58 seems to have been taken verbatim from the *acta senatus*.

Suetonius is careful to indicate the source when he relates the story told by his grandfather (Cal. 19), or recounts the events of which his father (Otho, 10) or he himself (Dom. 12) was an eyewitness.

There are also passages which indicate that Suetonius often took pains to consult different sources of information in regard to the same question, and that, after examining them all carefully, he formed his own opinion in view of all the evidence. This is observed in his treatment of the origin of the Octavian family (Aug. 2), and of the various accounts of the birthplace of Caligula (Cal. 8). We may here notice, too, the expressions *ut equidem mirer* (Aug. 3); *omitto senatus consulta quia possunt videri vel necessitate expressa vel verecundia* (Aug. 57); *nec ego id notare, nisi mihi mirum videretur tradidisse aliquos . . .* (Aug. 88); *Scio vulgo persuasum. . . . Ne illud quidem ignoro aliquos tradidisse. . . . Adduci tamen nequeo quin existimem . . .* (Tib. 21); *unde credo* (Cal. 51); *unde existimo* (Claud. 1); *ipse ne vestigium quidem de hoc, quamvis satis curiose inquirerem, inveni* (Vesp. 1). He presents matters of small importance (Claud. 1), *ne praetermitterem quam quia verum aut veri simile putem*.

In the light of this brief survey, we are able to understand to what extent Suetonius has expressly made mention of the writings and documents which he used as sources. If, therefore, he has referred so freely to the writers to whom he is indebted, and to the works from which he has made extracts, we may reasonably expect that he will as freely refer to the inscriptions, if he really used these as historical material.

¹ Cf. E. Hübner, *De Senatus populi que Romani actis*, in Fleckeisen's *Jahrbücher f. klass. Phil.* (suppl. Band, fünftes Heft), 1860, pp. 559-631.

THE MONUMENTUM ANCYRANUM AND SUETONIUS

In the discussion of the epigraphical sources, especially of the life of Augustus, we must consider, as of prime importance, the Monumentum Ancyranum. Suetonius's indebtedness to this inscription has been treated, other than by those mentioned above (p. 27), by Mommsen in his edition (pp. ix, 1, 31, 50, 91, 132).¹ That it may be better understood how far the language of Suetonius corresponds to that of the monument, I have subjoined the following table, in which I have introduced the text of the inscription so far as it deals with subject-matter transmitted also by Suetonius:

MONUMENTUM ANCYRANUM

1. Rerum gestarum divi Augusti, quibus orbem terra[rum] imperio populi Rom(ani) subiecit, et impensarum, quas in rem publicam populumque Ro[ma]num fecit, incisarum in duabus aeneis pilis, quae su[n]t Romae positae, exemplar sub[scri]ptum.

M.A. I, 1-3

2. Annos undeviginti natus exercitum privato consilio et privata impensa comparavi, per quem rem publicam [do]minatione factionis oppressam in libertatem vindica[vi].

M.A. I, 6, 7

3. Res publica n[on]ne quid detrimenti caperet, me] pro praetore simul cum consulibus pro[videre] iussit].

M.A. I, 10-12

4. Qui parentem meum [interfecer]un[t, eo]s in exilium expulsi iudiciis legitimis ultus eorum [fa]ci[n]t[us, e]t postea bellum inferentis rei publicae vici b[ea]t[us].

SUETONIUS

Augustus, 101

... indicem rerum a se gestarum, quem vellet incidi in aeneis tabulis, quae ante Mausoleum statuerentur.

Aug. 8

Atque ab eo tempore exercitibus comparatis ... solus rem p. tenuit.

Aug. 10

iussusque comparato exercitui pro praetore praeesse et cum Hirtio ac Pansa, qui consulatum susceperant, D. Bruto opem ferre.

Aug. 10

nihil convenientius ducens quam necem avunculi vindicare tuerique acta, ... Brutum Cassiumque ... legibus adgredi reosque caedis absentis deferre statuit.

Aug. 13

Philippense quoque bellum ... duplici proelio transegit.

¹ *Res Gestae Divi Augusti*, Berol. 1883.

M.A. I, 13

5. B]ella terra et mari c[ivilia exter]uaque
toto in orbe terrarum s[uscepi].

Aug. 9

Bella civilia quinque
gessit.

M.A. I, 21, 22

6. Bis] ovans trium-
pha[vi, tris egi c]urulis
triumphos.

Aug. 22

Bis ovans ingressus est urbem, post Philip-
pense et rursus post Siculum bellum. Curulis
triumphos tris egit, Delmaticum, Actiacum,
Alexandrinum, continuo triduo omnes.

M.A. I, 24, 25

7. Ob res a [me aut per legatos]
meos auspiciis meis terra m[arique]e
pr[o]spere gestas, etc.

Aug. 21

Domuit autem partim ductu par-
tim auspiciis suis Cantabriam, Aquit-
taniam, etc.

M.A. I, 31, 32

8. Dictatura]m et apsent[i et
praesenti mihi datam . . . a populo
et senatu M. Marce]llo e[t] L. Ar-
[runtio consulibus non accepi.

Aug. 52

Dictaturam magna vi offerente
populo, genu nixus deiecta ab ume-
ris toga nudo pectore deprecatus
est.

M.A. I, 32-35

9. Non recusavi in summa fru-
menti p]enuri[a c]uratio[ne]m an-
[nonae, qu]am ita ad[ministravi,
ut . . . paucis diebu]s metu et
per[i]c[ulo] quo erat populu]m uni-
v[ersum] meis impensis liberarem].

Aug. 41

Frumentum quoque in annonae
difficultatibus saepe levissimo, inter-
dum nullo pretio viritim admensus
est tesserassque nummarias dupli-
cavit.

Cf. also Aug. 42.

M.A. I, 35, 36

10. Con[sulatum] tum dat]um
annuum e[t] perpetuum non ac-
cepi].

Aug. 26 treats of the consulships
of Augustus, but nothing is said
about the consulship for life being
offered him.

M.A. Gr. III, 14-19

11. τῆς [τε σ]υνκλήτου καὶ τοῦ δήμου τοῦ
Ῥωμαίων ὁμολογ[ο]ύντων, ἔν[α ἐπιμε]λητῆς τῶν
τε νόμων καὶ τῶν τρόπων ἐ[πὶ τῇ με]ρίσσει
[ἐξ]ουστ[ία μ]ό[νο]ς χειροτονηθῶ, ἀρχὴν οὐδε-
μ[ία]ν παρὰ τὰ π[α]τρ[ια] εἰ[θ] διδομένην
ἀνεδεξάμην.

Aug. 27

Recepit et morum le-
gumque regimen aequè
perpetuum . . .

M.A. Gr. III, 19-23

12. ἃ δὲ τότε δι' ἐμοῦ ἡ σύνκλητος οἰκono-
μείσθαι ἐβούλετο. τῆς δημοκρατικῆς ἐξo[v]σίας
ὡν ἐτέλη[σα. K]αὶ ταύτης αὐτῆς τῆς ἀρχῆς
συνάρχοντα αὐτ[ὸς] ἀπὸ τῆς συνκλήτου π[ε]ν[τά]-
κις αἰτήσας [ἐλ]αβον.

Aug. 27

Tribuniciam potesta-
tem perpetuam recepit,
in qua semel atque ite-
rum per singula lustra
collegam sibi cooptavit.

M.A. Gr. IV, 1, 2

13. Τριῶν ἀνδρῶν ἐγνόμην δημο-
σίων πραγμάτων κατορθωτῆς συνεχέ-
σιν ἔτεσιν δέκα.

Aug. 27

Triumviratum rei p. constituen-
dae per decem annos administravit.

M.A. II, 1, 2

14. Senatum ter legi.

Aug. 35

Senatorum affluentem numerum deformi et
incondita turba . . . ad modum pristinum et
splendorem redegit duabus lectionibus; etc.

M.A. II, 2-11

15. et in consulatu sexto censum populi con-
lega M. Agrippa egi. Lustrum post annum al-
terum et quadragensimum fec[i]. Quo lustrō
civium Romanorum censa sunt capita quadra-
giens centum millia et sexag[i]nta tria millia.
[Iteru]m consulari cum imperio lustrum [s]olus
fecit C. Censorin[o et C.] Asinio cos. Quo lustrō
censa sunt civium Romanoru[m] capita] quadra-
giens centum millia et ducenta triginta tria
m[illia]. Tertiu]m consulari cum imperio lu-
strum conlega Tib. Cae[sare filio feci] Sex.
Pompeio et Sex. Appuleio cos. Quo lustrō
ce[nsa sunt civium Ro]manorum capitum qua-
dragiens centum mill[ia et nongenta tr]iginta
et septem millia.

Aug. 27

Recepit et morum le-
gumque regimen aequē
perpetuum, quo iure,
quamquam sine censurae
honore censum tamen
populi ter egit: primum
ac tertium cum collega,
medium solus.

M.A. II, 12-14

16. Legibus novi[s] la-
tis complura e]xempla
maiorum exolescentia iam
ex nost[ro usu reduxi et
ipse] multarum rer[um
exe]mpla imitanda po-
s[teris tradidi].

Aug. 24

In re militari et commutavit multa et insti-
tuit, atque etiam ad antiquum morem nonnulla
revocavit.

Aug. 31: Nonnulla etiam ex antiquis caer-
imoniis paulatim abolita restituit, ut, etc.
Aug. 34: Leges retractavit, etc. Aug. 40: Etiam
habitus vestitusque pristinum reducere stu-
duit, etc. Aug. 43: Sed et Troiae lusus edi-
dit . . . prisci decorique moris existimans.

M.A. II, 23-28

17. Pontif]ex maximus ne fierem in vivi
[c]onle]gae locum, populo id sa]cerdotium
deferente mihi, quod pater meu[s] habuit, re-
cusavi. Cepi id] sacerdotium aliquod post
annos eo mor[tuo qui civilis motus, o]ccasione
occupaverat, cuncta ex Italia, etc.

Aug. 31

Postquam vero pontifi-
catum maximum, quem
numquam vivo Lepido
auferre sustinuerat, mor-
tuo demum suscepit.

M.A. II, 34-37

18. [Senatus consulto eodem tempor]e pars [praetorum et tri]bunorum [plebi cum consule Q. Lucret]io et princi[pi]bus [viris ob]viam mihi mis[s]a e[st in Campan]ia[m, qui] honos [ad hoc tempus] nemini praeter [m]e es[t decretus.

M.A. II, 42-45

19. [I]anum Quirin[um, quem cl]aussum ess[e maiores nostri voluer]unt, [cum p]er totum i[mperium po]puli Roma[ni terra mari-que es]set parta vic[torii]s pax, cum pr[us, quam] nascerer, [a condita] u[rb]e bis omnino clausum [f]uisse prodatur m[emori]ae, ter me princi[p]e senat[us] claudendum esse censui[t].

M.A. II, 46-III, 1

20. Filios meos, quos iuv[enes mi]hi eripuit for[tuna, Gaium et Lucium Caesares honoris mei caussa, etc.

M.A. III, 7-21

21. Plebei Romanae viritim HS trecentos numeravi ex testamento patris mei, et nomine meo HS quadringenos ex bellorum manib[us] consul quintum dedi, iterum autem in consulatu decimo ex [p]atrimonio meo HS quadringenos congiari viritim pernumer[a]vi, et consul undecimum duodecim frumentationes frumento pr[i]vatim coempto emensus sum, et tribunicia potestate duodecim quadringenos nummos tertium viritim dedi. Quae mea congiaria p[er]venerunt ad [homi]num millia nunquam minus quinquaginta et ducenta. Tribu[nic]iae potestatis duodevicensimum consul XII trecentis et vigint[i] millibus plebis urbanae sexagenos denarios viritim dedi. In colon[i]s militum meorum consul quintum ex manib[us] viritim millia nummum singula dedi; acceperunt id triumphale congiarium in colo[n]is hominum circiter centum et viginti millia. Consul tertium dec[i]mum sexagenos denarios plebei, quae tum frumentum publicum accipieba[t], dedi; ea millia hominum paullo plura quam ducenta fuerunt.

Aug. 57

Revertentem ex provincia non solum faustis ominibus sed et modulatis carminibus prosequantur.

Aug. 22

Ianum Quirinum, semel atque iterum a condita urbe ante memoriam suam clausum, in multo breviori temporis spatio terra marique pace parta ter clusit.

Cf. Tib. 23: Quoniam atrox fortuna Gaium et Lucium filios mihi eripuit. Cf. also Aug. 26.

Aug. 41

Congiaria populo frequenter dedit, sed diversae fere summae; modo quadringenos, modo trecentos, nonnumquam ducentos quinquagenosque (here Mommsen conjectures rather quadragenosque) nummos.

Caes. 83

Viritim trecentos sester-tios legavit (Caesar).

M.A. III, 35-39

22. et M. Lep[i]do et L. Ar[r]unt[i]o eos. i[n] aerarium militare, quod ex consilio m[eo] co[nstitut]um est, ex [q]uo praemia darentur militibus, qui vicena [aut plu]ra sti[pendi]a emeruissent, HS milliens et septing[e]nti[ens] ex pa[t]rim[onio] m[eo] detuli.

M.A. IV, 1-4

23. Curiam et curiam ei chalcidicum, templumque Apollinis in Palatio cum porticibus, . . . Lupercal, porticum ad Circum Flaminium, quam sum appellari passus ex nomine eius qui priorem eodem in solo fecerat, Octaviam, etc.

M.A. IV, 12-16

24. Forum Iulium et basilicam, quae fuit inter aedem Castoris et aedem Saturni, coepta profligataque opera a patre meo perfecti et eandem basilicam consumptam incendio ampliata eius solo sub titulo nominis filiorum m[eorum] i[n]co[n]havi et, si vivus non perfecissem, perfici ab heredib[us] iussi].

M.A. IV, 17, 18

25. Duo et octoginta templa deum in urbe consul sext[um] ex decreto] senatus refeci, nullo praetermisso quod e[o] temp[ore] refici debebat].

M.A. IV, 19

26. Con[s]ul septimum viam Flaminiam a[b] urbe] Ari[mini]um feci.

M.A. IV, 21, 22

27. In privato solo Martis Ultoris templum [f]orumque Augustum [ex mani]biis feci.

Aug. 49

utque perpetuo ac sine difficultate sumptus ad tuendos eos prosequendosque suppeteret, aerarium militare cum vectigalibus novis constituit.

Cf. Dio, I.V, 25.

Aug. 29

Publica opera plurima extruxit, e quibus vel praecipua: . . . templum Apollinis in Palatio, . . . Templum Apollinis in ea parte Palatinae domus excitavit . . .; addidit porticus cum bibliotheca Latina Graecaque. . . . Quaedam etiam opera sub nomine alieno, nepotum scilicet et uxoris sororisque, fecit, ut . . . porticus Liviae et Octaviae.

Aug. 31: Nonnulla etiam ex antiquis caerimoniis paulatim abolita restituit, . . . ut sacrum Lupercale.

Aug. 29

Quaedam etiam opera aut nomine alieno nepotum scilicet et uxoris sororisque fecit, ut porticum basilicamque Gai et Luci, . . .

Aug. 30

Aedes sacras vetustate conlapsas aut incendio absumptas refecit.

Aug. 30

desumpta sibi Flaminia via Arimino tenus munienda. (Cf. C.I.L. XI, 365.)

Aug. 29

Publica opera plurima extruxit, e quibus vel praecipua: Forum cum aede Martis Ultoris . . . Aedem Martis bello Philippensi, pro ultione paterna suscepto, voverat.

M.A. IV, 22, 23

28. Theatrum ad aede (*sic*) Apollinis in solo magna ex parte a p[r]i-
[v]atis empto feci, quod sub nomine
M. Marcell[i] generi mei esset.

Aug. 29

Quaedam etiam opera sub nomine
alieno, nepotum scilicet et uxoris
sororisque, fecit; ut . . . theatrum
Marcelli.

M.A. IV, 23-26

29. Don[a e]x manibiis in Capi-
tolio et in aede divi Iu[l]i et in aede
Apollinis et in aede Vestae et in tem-
plo Martis Ultoris consecravi, quae
mihi constiterunt HS circiter mil-
liens.

Aug. 30

Aedes sacras . . . refecit easque et
ceteras opulentissimis donis adorna-
vit, ut qui in cellam Capitolini Iovis
sedecim milia pondo auri gemmas-
que ac margaritas quingenties sester-
tii una donatione contulerit.

M.A. IV, 33-35

30. Bis [at]hletarum undique accitorum
spec[ta]c[ul]um po[pulo] pra[ebui] meo] nomine
et tertium nepo[tis] mei nomine.

Aug. 43

Athletas quoque (edi-
dit), extractis in Campo
Martio sedilibus ligneis.

M.A. IV, 35, 36

31. L[u]dos feci m[eo]
no[m]i[n]e] quater, alio-
rum autem m[agist]ra-
tu[um] vicem ter et
vici[us].

Aug. 43

Fecisse se ludos ait suo nomine quater, pro
aliis magistratibus, qui aut abessent aut non
sufficerent, ter et vices.

M.A. IV, 36, 37

32. [Pr]o conlegio XV virorum magis[ter]
conl[eg]e[gi] colleg[a] M. Agrippa lud[os s]ae-
cl[are]s C. Furnio C. [S]ilano eos. [feci].

Aug. 31

Nonnulla etiam ex an-
tiquis caerimoniis . . .
restituit, ut . . . ludos
Saeculares.

M.A. IV, 39-42

33. [Ven]ati[o]n[es] best[ia]rum
Africanarum meo nomine aut filio-
[rum] meorum et nepotum in ci[r]co
aut [i]n foro aut in amphitheatris
popul[o d]edi sexiens et viciens, qui-
bus confecta sunt bestiarum circiter
tria m[ill]ia et quingentae.

Aug. 43

[Circensibus ludis gladiatorisque
muneribus frequentissime editis in-
teriecit plerumque bestiarum Afri-
canarum venationes, ro[tu] non in
foro modo nec in amphitheatro, sed
et in circo et in Saeptis . . . edidit.

M.A. IV, 43-45

34. Navalis proeli spectaculum populo de[di]
tr[ans] Tiberim, in quo loco nunc nemus est
Caesarum, cavato [solo] in longitudinem mille
et octingentos pedes, in latitudine[m] mille]
e[t] ducenti.

Aug. 43

item navale proelium,
circa Tiberim cavato solo,
in quo nunc Caesarum
nemus est.

M.A. IV, 51-54

35. Statuae [mea]e pedestres et equestres et in quadrigéis argenteae steterunt in urbe **XXC** circiter, quas ipse sustuli exque ea pecunia dona aurea in aede Apol[li]nis meo nomine et illorum, qui mihi statuarum honorem habuerunt, posui.

M.A. V, 3, 4

36. Iuravit in mea verba tota Italia sponte sua et me be[lli]. quo vici ad Actium, ducem deposcit.

M.A. V, 10-12

37. Gallias et Hispanias provicia[s] (*sic*) et Germaniam qua includit oceanus a Gadibus ad ostium Albis flum[inis] pacavi.

M.A. V, 12-14

38. Alpes a re[gione] ea, quae proxima est Hadriano mari, [ad Tuscum] pacari fec[i] nulli genti bello per iniuriam inlato.

M.A. V, 24-27

39. Armeniam maiorem interfecto rege eius Artaxe c[u]m possem facere provinciam, malui maiorum nostrorum exemplo regn[u]m id Tigrani regis Artavasdis filio, nepoti autem Tigranis regis, per T[i. Ne]ronem trad[er]e, qui tum mihi priv[ig]uus erat.

M.A. V, 36-38

40. Italia autem **XXVIII** [colo]nias, quae vivo me celeberrimae et frequentissimae fuerunt, me[is] auspiciis deductas hab[et].

M.A. V, 40-42

41. Parthos trium exercitum (*sic*) Roman[or]um spolia et signa re[d]dere mihi supplicesque amicitiam populi Romani petere [coegi].

M.A. V, 44-49

42. Pannoniorum gentes, qua[s] ante me principem populi Romani exercitus nunquam ad[i]t, devictas per Ti. [Ne]ronem, qui tum erat pri-

Aug. 52

in urbe . . . atque etiam argenteas statuas olim sibi positas conflavit omnes exque iis aureas cortinas Apollini Palatino dedicavit.

Aug. 17

Bononiensibus quoque publice . . . gratiam fecit coniurandi cum tota Italia pro partibus suis.

Aug. 21

Germanosque ultra Albin fluvium summovit.

Aug. 21

Nec ulli genti sine iustis et necessariis causis bellum intulit.

Tib. 9

dein ducto ad Orientem exercitu, regnum Armeniae Tigrani restituit.
Cf. also Aug. 48.

Aug. 46

Italiam duodetriginta coloniarum numero, deductarum ab se, frequentavit.

Aug. 21

Parthi quoque . . . signa militaria, quae M. Crasso et M. Antonio ademerant, reposcenti reddiderunt obsidesque insuper optulerunt.
Cf. also Tib. 9.

Tib. 16

Ac perseverantiae grande pretium tulit, toto Illyrico, quod inter Italiam regnumque Noricum et Thraciam et Macedoniam interque

vignus et legatus meus, imperio populi Romani s[ubiec]i protulique fines Illyrici ad r[ip]am fluminis Dan[u]i, citr[a] quod Dacorum tran[s]gressus exercitus meis a[u]s-p[icis] vict[us] profligatusque [est et postea tran]s Dan[u]vium ductus ex[ercitus me]u[s] Da[cor]um gentes im[peria] populi Romani perferre coegit].

M.A. V, 50-52

43. Ad me ex In[di]a regum legationes saepe missae sunt, numquam antea visae] apud qu[em]q[uam] R[omanorum] du[ce]m. Nostram am[icitiam] petierunt] per legat[os] B[a]starn[ae] Scythae]que et Sarmatarum q[ui], etc.

M.A. VI, 9-12

44. A me gentes Parthorum et Medoru[m] per legatos] principes earum gentium reges pet[i]tos acceperunt, Par[thi] Vononem regis Phr[jatis] filium, regis Orodis nepotem; Medi Ar[iobarzanem], regis Artavazdis filium, regis Ariobarzanis nep[otem].

M.A. VI, 13-15

45. In consulatu sexto et septimo, b[ella] ubi civil]ia exstinxeram per consensum universorum [potitus rerum omn]ium, rem publicam ex mea potestate in senat[us] populi-que Romani a]rbitrium transtuli.

M.A. VI, 16

46. Quo pro merito meo senatu[s] consulto Aug. appe]llatus sum.

M.A. VI, 24, 25

47. Tertium dec[i-]mum consulatu[m] cum gerebam, senatus et equ]ester ordo populus-q[ue] Romanus universus [appellavit me patrem p]atriae.

Danuvium flumen et sinum maris Hadriatici patet, perdomito et in dicionem redacto.

Aug. 21: Coercuit et Dacorum incursiones, tribus eorum ducibus cum magna copia caesis.

Aug. 21

Qua virtutis moderationisque fama, Indos etiam ac Scythos, auditu modo cognitos, pellexit ad amicitiam suam populi-que Rom. ultro per legatos petendam.

Aug. 21

Parthi . . . denique, pluribus quondam de regno concertantibus, non nisi ab ipso electum probaverunt.

Aug. 28

De reddenda re p. bis cogitavit: primum . . . ; ac rursus. . . . Sed reputans, et se privatum non sine periculo fore et illam plurimum arbitrio temere committi, in retinenda perseveravit, dubium, eventu meliore an voluntate.

Aug. 7

Augusti cognomen assumpsit . . . Munati Planci sententia, etc.

Aug. 58

Patris patriae cognomen universi repente maximoque consensu detulerunt ei: prima plebs, legatione Antium missa; dein, quia non recipiebat, ineunti Romae, spectacula frequens et laureata; mox in curia senatus, neque decreto neque adclamatione, sed per Valerium Messalam. Is mandantibus cunctis, etc.

The language¹ of *Aug.* 101 is strikingly similar to that of the heading of the Monumentum Ancyranum, and, because of this, Mommsen (*op. cit.* p. 1) asserts *Apparet Suetonium ipsam commentarii inscriptionem in mente habuisse, cum haec scripsit.* But if we compare the words of Suetonius with the heading of the inscription which stood in Rome, before the Mausoleum of Augustus, we shall find that in reality there are only four words common to both, namely, *rerum a se gestarum.* For the heading in Rome, as seems most probable, and as Mommsen himself suggests (p. 2), ran as follows: *Res gestae divi Augusti, quibus orbem terrarum imperio populi Romani subiecit, et impensae, quas in rem publicam populumque Romanum fecit.*² But I cannot believe that the historian copied the heading of the inscription that was set up in Rome, and then, after the examination of this evidence alone, wrote the passage in *Aug.* 101 above quoted. My reason lies in his own words, *quem vellet incidi in aeneis tabulis, quae ante Mausoleum statuerentur*, which clearly point to some document written before the inscription was cut, and, in fact, directing the making and setting up of it; they seem to me to refer to the *volumen*, or, at any rate, to a copy of it, which was prepared by Augustus and deposited with the Vestal Virgins, by whom it was made public after the Emperor's death (*Aug.* 101). This document may very well have been inscribed *Index rerum a me gestarum quem volo incidi in aeneis tabulis quae ante Mausoleum statuuntur.* The opinion that Suetonius's source in writing the passage under discussion was either this *volumen*, or a copy of it, has been held also by O. Clason,³ by J. Schmidt,⁴ and by Cantarelli.⁵

¹ Cf. the words of Dio LVI, 33, whose source seems to be Suetonius: τὰ ἔργα ἃ ἔπραξε πάντα ἃ καὶ ἐς χαλκᾶς στήλας πρὸς τῷ ἡρώει αὐτοῦ σταθεῖσας ἀναγραφῆναι ἐκέλευσε.

² On the wording of the title of the original inscription, cf. the articles of J. Schmidt, *Philologus*, XLIV, pp. 442 ff., XLV, pp. 393 ff., XLVI, pp. 70 ff.; of E. Bormann, *Rektoratsprogr. der Marburger Univ.*, 1884; O. Hirschfeld, *Wiener Studien*, 1885, pp. 170 ff.; Wilamowitz-Möllendorff, *Hermes*, XXI, pp. 623 ff.; Wölfflin, *Sitzungsb. d. Münch. Acad.*, 1886, p. 253 ff.

³ *Tacitus und Sueton*, Breslau, 1870, p. 57.

⁴ *Philologus*, XLV, pp. 402, 403.

⁵ *Bull. del. Com. Arch.* XVII, pp. 64 f.

The latter, moreover, doubts that the document could have been inscribed *Index rerum a me gestarum*, etc., since this is too specific an expression. He says "mi fa suporre che, nel testamento o nei *mandata de funere* egli abbia usato, per manifestare la sua ultima volontà, rispetto allo scritto da lui composto, non un termine speciale come quello che troviamo in Suetonio, ma una espressione generica, indeterminata, simile a questa: quae scripsi altero volumine volo in eidei in duobus aeneis tabulis quae ante Mausoleum statuuntur." Some such expression as *Divi Augusti index rerum a se gestarum*, Cantarelli thinks, was incorporated in the heading by the heirs of Augustus. Nissen conjectures¹ that possibly copies of the original *volumen*, or of the inscription itself, were in general circulation, entitled *Divi Augusti index rerum a se gestarum*, and that one of these came into the hands of Suetonius.² Mommsen indeed says: "Indice ita Romae publice proposito, quem et auctoritas et brevis commendaret, non mirum est usos esse rerum scriptores, quorum ex iis qui extant notitiam eius habuerunt Velleius et Suetonius . . . Libelli forma indicem publice editum esse testatum non habemus; et Velleius quidem Suetoniusque fieri potest ut eum legerint in ipso aere, neque grammatici eum citant. At cum ii citent testamentum, probabile est indicem quoque hominibus doctis aetatis posterioris in manibus fuisse" (p. ix), "Apparet Suetonium ipsam commentarii inscriptionem in mente habuisse" (p. 1), "indicem videlicet secutus" (p. 50), "Haec ex ipso indice citat Suetonius" (p. 91). Apparently he maintains that the historian used the *Index* alone in his account, but in a later article³ his views are more clearly expressed: "Die Worte Suetons scheinen auch nach ihrer Fassung nicht aus der Denkschrift, sondern aus der die Aufstellung anordnenden Verfügung entnommen zu sein und diese in indirecter Rede anzuführen." He continues:

¹ *Rhein. Mus.* XLI, p. 492.

² See *l.c.* p. 497 (*An.*), "Sueton muss eine Abschrift der Aufzeichnung am Mausoleum vor sich gehabt haben."

³ *Hist. Zeit.* 1887, LVII, pp. 391 ff.

"Ist dies der Fall, so bezeichnete der Kaiser selbst die Denkschrift als 'indicem rerum a se gestarum' und sollte selbst diese Wortfassung von Sueton herrühren, so ist es, auch von ihm abgesehen, mehr als wahrscheinlich, dass der Titel, wie wir ihn lesen, an die in jener Anordnung gebrauchte Bezeichnung sich angeschlossen hat." Finally, it needs to be noticed that in the passage in Suetonius the following words do not occur: "quibus orbem terrarum imperio populi Romani subiecit, et impensae, quas in rem publicam populumque Romanum fecit." These words were probably not inscribed upon the *volumen* prepared by Augustus, but were, rather, added later by Tiberius, when the inscription itself was cut.¹

That all these *volumina* were opened in the Senate and read by Drusus we learn from Dio Cassius, LVI, 33, Tac. *Ann.* I, 8, Suet. *Aug.* 101; that they were then treasured up in some of the public archives, where Suetonius could have consulted them, is very probable; finally that Suetonius had access to various private documents of this nature, we may conjecture from several passages, *Aug.* 50, 71, 87 (2) (see below, p. 44); besides, from Spart. 12. 3, we know that Suetonius held the important post of *epistularum magister* under the Emperor Hadrian.

Some passages in Suetonius correspond to the inscription, but with varying closeness.

(1) The correspondence is sometimes almost word for word; for example,

Aug. 27, Receipt . . . perpetuum, and
M.A. Gr. III, 14-19, τῆς [τε σ]υνκλήτου . . . ἀνεδεξάμην (but see below, p. 42)
(see no. 11, in the table of parallel passages);

Aug. 27, Triumviratum . . . administravit, and
M.A. Gr. IV, 1, 2, τριῶν ἀνδρῶν . . . δέκα (see no. 13);

Aug. 43, Fecisse . . . vices, and
M.A. IV, 35, 36, L[u]dos . . . vicie[ns] (see no. 31);

Aug. 43, item navale . . . nemus est, and
M.A. IV, 43-45, Navalis . . . ducent (see no. 34).

¹ This is called into question by Geppert, *Zum Monumentum Ancyranum*, Prog. d. Berl. Gymn. zum Grauen Kloster. Berol. 1887, p. 12.

Three conjectures may be made to explain these close resemblances. Suetonius's source in these passages was either (1) the inscription itself inscribed upon the bronze tablets, or (2) some earlier historian who had copied it or the original document, or (3) that original *volumen* (or a copy of it), the heading of which (as we have seen, pp. 38 ff.) Suetonius was probably thinking of, when he wrote *Aug.* 101, *indicem rerum a se gestarum*, etc. The third conjecture seems to me by far the most probable.

The words *qui aut abessent aut non sufficerent* of *Aug.* 43, or language of similar content, are not transmitted by the *Mon. Anc.* One wonders whether this phrase was not in the original document prepared by Augustus, but was omitted, as being unnecessary, from the final revision made by Tiberius before the inscription was cut. Possibly, however, it was taken by Suetonius from some other source.

(2) The correspondence manifests itself in a striking similarity of language:

Aug. 22, *Bis ovans . . . triduo omnes, and*

M.A. I, 21, 22, *Bis] ovans . . . triumphos*¹ (see no. 6);

Aug. 43, *non in foro . . . edidit*,² *and*

M.A. IV, 39-42, *[Ven]ati[o]n[es] . . . quingentae* (see no. 33);

Aug. 21, *nec . . . intulit, and*

M.A. V, 12-14, *Alpes . . . inlato* (see no. 38);

Aug. 46, *Italiam . . . frequentavit, and*

M.A. V, 36-38, *Italia . . . hab[et]* (see no. 40).

(3) The correspondence is seen in excerpts, at times quite full:

Aug. 27, *Recepit et morum . . . solus, and*

M.A. II, 2-11, *et in consulatu . . . septem millia*³ (see no. 15);

¹ But compare the very similar manner of expression in *Tib.* 9, *Et ovans et curru urbem ingressus est*; *Cal.* 49, *ovans urbem . . . ingressus est*; *Oros.* 6. 18, *ovans urbem ingressus*; *Livy, Ep.* 133, *tres triumphos egit*. Besides, the additional matter given in the passage of Suetonius permits us to think of other sources as well. Cf. the *acta triumphorum* of the years 40 and 36 B.C. (*C.I.L.* I², p. 180), which Suetonius does not seem to have examined.

² *Et in saeptis* is clearly from some other source. Cf. *Cal.* 18.

³ Cf. Gardthausen, *Augustus*, II, 2, pp. 531 f.

- Aug.* 31, Postquam vero . . . suscepit, *and*
M.A. II, 23-28, Pontif]ex . . . occupaverat (see no. 17);
Aug. 22, Ianum Quirinum . . . clusit, *and*
M.A. II, 42-45, [Ianum] Quirin[um . . . censui[t] (see no. 19);
Aug. 41, Congiaria . . . nummos,¹
Caes. 83, viritum . . . legavit, *and*
M.A. III, 7-21, Plebei Romanae . . . ducenta fuerunt (see no. 21);
Aug. 49, utque perpetuo . . . constituit, *and*
M.A. III, 35-39, et M. Lep[i]do . . . detuli (see no. 22);
Aug. 29, Quaedam etiam opera . . . Gai et Luci, *and*
M.A. IV, 12-16, Forum Iulium . . . heredib[us iussi]² (see no. 24);
Aug. 52, in urbe . . . dedicavit, *and*
M.A. IV, 51-54, statuæ . . . posui (see no. 35);
Aug. 21, Germanosque . . . summovit, *and*
M.A. V, 10-12, Gallias . . . pacavi (see no. 37);
Aug. 21, Parthi . . . probaverunt, *and*
M.A. VI, 9-12, A me gentes Parthorum . . . nep[otem] (see no. 44).

In the following passages, the statements of Suetonius differ from³ those of the inscription :

- Aug.* 27, Recepit . . . perpetuum, *and*
M.A. Gr. III, 14-19, τῆς [τε σ]υνκλήτου . . . ἀντιδείμην (v. above, p. 40,
 Mommsen, pp. 28, 29, and Gardthausen, *Augustus* II, 2, pp. 521, 522)
 (see no. 11);
Aug. 27, Tribuniciam . . . cooptavit, *and*
M.A. Gr. III, 19-23, αὐτὸς δὲ τὸν . . . [ἐλ]αβον (see Mommsen, p. 31) (see no. 12);
Aug. 35, Senatorum . . . lectionibus, *and*
M.A. II, 1, 2, Senatum ter legi (Mommsen, pp. 35, 36) (see no. 14);
Aug. 29, Quaedam etiam opera . . . Octaviae, *and*
M.A. IV, 2-4, porticum . . . Octaviam (Mommsen, p. 80; Festus, p. 178,
 speaks of these two porticus) (see no. 23);

¹ Here again Suetonius records information that is not found in the inscription; for, independently of the latter, he makes mention of the amounts of two hundred, and of fifty (Mommsen, p. 60, proposes the reading *quadragenosque*) sesterii, gifts of Augustus to the people; on the other hand, he says nothing about the sixty denarii, which, according to the *Mon. Anc.*, Augustus gave to each of the plebs.

² Cf., in general, all of *Aug.* 29, 30, 31, and *M.A.* IV, 1-26 (see nos. 23-29), *curiam et continens* . . . *circiter milliens*. In the case of some of these buildings, Suetonius knew of their being constructed or restored by Augustus, very likely from an examination of their dedicatory inscriptions.

³ Some discrepancies are noted also by Egger (*op. cit.* pp. 271, 272).

Aug. 28, De reddenda . . . voluntate, and

M.A. VI, 13-15, In consulatu sexto . . . transtuli (Mommson, p. 146) (see no. 24).

Suetonius makes no reference whatever to some subjects that are treated fully in the *Mon. Anc.*, e. g. the number of soldiers and ships captured (*M.A.* I, 16-20), the priestly offices of the Emperor (*M.A.* I, 45, 46), the vows undertaken (II, 15-20), the altar of Fortuna Redux (II, 29-33), the altar of Pax Augusta (II, 37-41), the rewards of the veterans (III, 22-33), the aqueducts (IV, 10-12), the clearing of the sea from pirates (V, 1-3), and the fleet (V, 14-23). As regards the other passages of Suetonius, although their context is similar to that of the *Mon. Anc.*, yet the language of the former is not such that we can assume that they depend directly upon the inscription.

A study of the parallel column above at once directs attention to the noteworthy fact that all the close resemblances in the text of the historian to the *Mon. Anc.* IV, 1-26 (see nos. 23-29), occur in two consecutive¹ chapters, *Aug.* 29, 30. Suetonius seems, at one time, to have made brief notes in a summary manner, as when he says, *Quaedam etiam opera sub nomine alieno, nepotum scilicet et uxoris sororisque fecit, ut*, etc.; at another time, to have added other interesting matter, taken from another source, e. g. the reasons for building the temple of Mars Ultor, and for constructing the Forum Augusti; and how it happened that Augustus consecrated the temple of Jupiter Tonans.

It is worthy of note, also, that what is said about the Gauls is transmitted in consecutive text by both Suetonius (*Aug.* 43) and the *Mon. Anc.* (IV, 33-48) (see nos. 30-34), as well as the relations of Augustus with the barbaric nations (*Aug.* 21; *M.A.* V, 9-VI, 12) (see nos. 37-44).

From all this the conclusion may be drawn that we are in no

¹ Nissen (*l.c.*) has tried to show that Suetonius's whole scheme of arranging his material for the life of Augustus depends upon the *Mon. Anc.* C. Wachsmuth, *Einleitung in das Studium der alten Geschichte* (Leipzig, 1895), p. 685, n. 2, is not convinced of the truth of Nissen's theory.

way authorized by the resemblances that plainly exist between the text of Suetonius and the *Mon. Anc.* to affirm that the historian read the inscription *in ipso aere*; on the other hand, from what Suetonius says regarding the original *volumen* (*Aug.* 101; cf. above, pp. 38 ff.), we may rather suppose that he consulted *only* this document, or a copy of it, and that from this he made all the extracts above cited.¹

Besides the will of Augustus, and the *volumina* prepared by him (*Aug.* 101, *Tib.* 23), Suetonius was acquainted with the wills of Julius Caesar (*Caes.* 83) and of Tiberius (*Tib.* 76).

Finally, he not only made use of many letters of the Emperors (see above, p. 28), but had access even to certain autograph letters of Augustus. In *Aug.* 87, he reports certain peculiarities, which *litterae ipsius autographicae ostentant*; ² and below he says, *Notavi et in chirographo eius illa praecipue: non dividit verba nec ab extrema parte versuum abundantis litteras in alterum transfert, sed ibidem statim subicit circumducitque*. In *ibid.* 88 he discusses the orthography of Augustus. We may compare also *ibid.* 71, *autographa quadam epistula . . . ait*.³

The remaining passages will be treated under the following heads: (1) Passages that seem to refer to inscriptions actually examined by Suetonius; (2) Passages referring to inscriptions that Suetonius may very likely have examined; (3) Passages referring to inscriptions that, in all probability, were not examined by Suetonius personally; (4) Passages referring in a general way to inscriptions themselves, or to

¹ If the two other *volumina* (*Aug.* 101) were extant, we might possibly find that Suetonius had made use of these, too, as sources.

² On the word *domos*, used by Augustus in the genitive case for *domus*, cf. Ritschl, *Opusc.* IV, p. 169, and Lindsay, *Latin Language*, pp. 380, 384; on *simus* for *sumus*, cf. *C.I.L.* IX, 3473, l. 14, and Lindsay, *L. L.*, p. 29. Compare Quint. *Inst. Orat.* I, 6, 19 and I, 7, 22, for other orthographical peculiarities in the letters of Augustus. His style, *neque praepositiones urbibus addere neque coniunctiones saepius iterare dubitavit*; etc. (*Aug.* 86), and other peculiarities of diction are discussed with reference to the *Mon. Anc.* by Wölfflin, *Sitzungsb. d. kön. bayr. Akad. d. Wissensch.*, 1896, II, pp. 162 f., 174-176, 178, 180.

³ Cf. also Nero 52, *Venere in manus meas pugillares libellique cum quibusdam notissimis versibus ipsius chirographo scriptis . . . ; ita multa et aeterna et inducta et superscripta inerant*.

monuments often inscribed; (5) Passages that exhibit a resemblance to existing inscriptions; (6) Miscellaneous references; (7) The Cognomina and Titles of the Emperors, occurring in Suetonius's narrative, as confirmed by the inscriptions.

L. PASSAGES THAT SEEM TO REFER TO INSCRIPTIONS ACTUALLY EXAMINED BY SUETONIUS

(a) SPECIFIC REFERENCE

Augustus, 7

Infanti cognomen Thurino inditum est, in memoriam maiorum originis, vel quod regione Thurina recens eo nato pater Octavius adversus fugitivos rem prospere gesserat. Thurinum cognominatum satis certa probatione tradiderim, nactus puerilem imagunculam eius aeream veterem, ferreis et paene iam exolescentibus litteris hoc nomine inscriptam, quae dono a me principi data inter cubiculi Lares colitur.

The *imaguncula* may have been a very small image of the youthful Octavius, of the kind often noted to-day in modern museums of antiquities. Of the two reasons which Suetonius advances to explain this cognomen, the first, *in memoriam maiorum originis*, must be rejected, because from no source do we learn that the Octavian *gens* came originally from Thurii, or its vicinity. But, on the contrary, we are told by Dio Cassius (XLV, 1), and by Suetonius himself (*Aug.* 1), that the Octavii were natives of Velitrae.¹ The second conjecture is much more plausible. It is well known (*App. B.C.* I, 117; *Flor.* III, 20, 5; cf. also *Suet. Aug.* 3) that Spartacus took possession of Thurii in 72 B.C., and that the remnant of the famous gladiator's band was destroyed by Cn. Octavius, the father of Augustus, while he was on his way to his provincial post in Macedonia,² that is, in 60 B.C., when his son was three years old. That Augustus bore this cognomen is known only from this passage in Suetonius, where the statement is based on three separate grounds, — (1) the *imaguncula* itself, (2) certain let-

¹ Cf. Gardthausen, *Augustus*, I, 1, p. 45.

² Cf. the inscription of Octavius, *C.I.L.* VI, 1311^b.

ters of M. Antonius, (3) certain letters written by Augustus in reply to Antonius. These letters, of course, have not come down to us.

Thurinus was not, however, a cognomen, properly speaking, as Suetonius seems to have regarded it, but Augustus, if he had this title in his earlier days, took it doubtless from his father, who earned it as 'cognomen ex virtute.' Other examples could be cited of similar cognomina, won by father and assumed by son. The two sons of P. Cornelius Scipio Africanus the elder were named: the one, L. Cornelius Scipio Africanus; the other, L. (or Cn.) Cornelius Scipio Africanus (cf. Marquardt, *Privatleben der Römer*, p. 16, n. 6). The cognomen Thurinus was not, at any rate, a permanent one of the Octavian *gens*, and was applied by Antonius to Augustus, rather as a term of abuse, as if he were provincial and boorish (*Aug. 7*).¹ In no inscription preserved to us is the cognomen Thurinus applied either to Augustus or to any member of the Octavian family.

Inscriptions upon *imagunculae* that have come down to us indicate the name, not of the person represented, but of the manufacturer, e. g. *C.I.L. X*, 5689. Possibly the letters in this particular *imaguncula* of Octavius were not sufficiently well understood by Suetonius, since he remarks upon their character, *paene iam exolescentibus litteris*. At any rate, the image was revered as that of the youthful Octavius because *inter cubiculi (principis) Lares colitur*.²

¹ So, too, the cognomen Aricina was applied in the same abusive way to Atia, mother of Augustus, *Cic. Phil. III*, vi, 15, where Cicero's reply reveals the meaning of the cognomen. Compare also *Cal. 23*, *Liviam Augustam . . . ignobilitatis . . . arguere ausus est, quasi materno avo decurione Fundano ortam*. Concerning the cognomen Thurinus, Drumann (*Geschichte Roms*, IV, p. 234) thinks that perhaps earlier in life Octavius, or his *gens*, placed a great deal of importance upon the achievement in the Thuringian district, and so assumed Thurinus as a 'cognomen ex virtute'; but that afterwards, when it was abandoned, the cognomen was applied to the members of the *gens* as a term of ridicule and abuse. Octavianus was called also *Καίριος*, according to Dio Cass. XLV, 1.

² Compare the note of Casaubon (ed. Wolf), III, pp. 239, 240, "Quod in litteris eius *imagunculae* quam commemorat Suetonius non magis fieri poterat quam caelaturae aureae in iis operibus quae hodie vocamus Damascena"; cf. Dio Cass.

(b) MORE GENERAL REFERENCE

Tiberius, 5

Tiberium quidam Fundis natum existimaverunt, secuti levem coniecturam, quod materna eius avia Fundana fuerit, et quod mox simulacrum Felicitatis ex S. C. publicatum ibi sit. Sed ut plures certioresque tradunt, natus est Romae in Palatio XVI. Kal. Dec. M. Aemilio Lepido iterum, L. Munatio Planco cons. per bellum Philippense. Sic enim in fastos actaque in publica relatum est.

Just what is meant by *fasti* here is not at once apparent, since the ancients used this term of various kinds of records. At first, those days were called *fasti* on which it was permitted *fari apud praetorem*; then it came to mean the series or sequence of *dies fasti*, in other words, the calendar; and finally, as belonging to, or forming a part of, the calendar, the *fasti* came to mean the consecutive series or records of the consuls; or also the records of different priestly offices (Marquardt, *Römische Staatsverwaltung*, III², pp. 300, 301). The testimony of the passage of Suetonius in question is confirmed by the *Fasti Anni Iuliani*. Appended to the date of November 16 (XVI, k. Dec.), we read (*C.I.L.* I², p. 335) *Natales Ti. Caesaris*, FER. CVM; *Ti. Aug(usti) Natal(is)*, ANT.¹ Suetonius seems to have been familiar with *fasti* of this class, for he speaks (*de Ill. Gram.* 17), of the *fasti* at Praeneste, as *marmoreo pariete incisos* (see *C.I.L.* I², p. 230). But it needs to be noted that Suetonius, in the passage in question, has quoted the *fasti* for the purpose of corroborating the account of the place where

XLIV, 7. On the cognomina, etc., of Augustus, see Weichert, *Imp. Caes. Aug. scriptorum reliquiae*, pp. 61 ff.

¹ The birthdays of other emperors as recorded (*Aug. 5*, *Cal. 8*, *Claud. 2*) by Suetonius agree with the *Fasti*; but the historian does not indicate the source of his information. On the other hand, the day on which Drusus, the son of Tiberius, was born, is not mentioned (*Tib. 7*), or the day on which Agrippa was born (*Cal. 7*), or the day when Augustus assumed the *toga virilis* (*Aug. 8*), although the information could have been gained by an examination of the *Fasti*. Finally, when Suetonius treats of subjects mentioned also by the *Fasti*, his language is not such as would lead us to believe that the latter were his source of information. Compare, for example, *Aug. 31*, and the *Fasti pr. non. Mart.*, concerning the office of pontifex maximus; *Tib. 2*, and the *Fasti pr. non. Apr.*, concerning the introduction into Rome of the worship of the Magna Mater; *Tib. 25*, and the *Fasti id. Sept.*, concerning the impious designs of M. Libo.

Tiberius was born. Baumgarten-Crusius (*l.c.* p. 267) considers the -que ἐξηγητικόν, for "fasti sunt pars actorum publicorum."

Caligula, 23

Livium Augustam proaviam, Ulixem stolatum identidem appellans, etiam ignobilitatis quadam ad senatum epistula arguere ausus est, quasi materno avo decurione Fundano ortam; cum publicis monumentis certum sit, Aufidium Lurconem [*Mss.* Lyrgonem] Romae honoribus functum.

As a matter of fact, the nomen of Livia's grandfather on her mother's side was *Alfidius*, not *Aufidius*. See *C.I.L.* IX, 3661, ALFIDIA M. F. MATER AUGUSTAE; *ibid.* II, 1667, ALFIDIAE MAT. AUGUSTAE; *Bull. de l'école française d'Athènes*, 1868-71, p. 231, ὁ δῆμος | Ἀλφιδίαν τὴν μητέρα θεᾶς Ἰουλίας | Σεβαστ[ῆ]ς, etc. For an explanation of the discrepancy, see Pauly-Wisowa, *Real-Ency.*, under *Aufidius Lurco*. The confusion between *Alfidius* and *Aufidius* suggests that there may have been a close resemblance in the vulgar pronunciation.

Claudius, 41

Novas etiam commentus est litteras tres, ac numero veterum quasi maxime necessarias addidit; de quarum ratione cum privatus adhuc volumen edidisset, mox princeps non difficulter optinuit ut in usu quoque promiscuo essent. Extat talis scriptura in plerisque libris ac diurnis titulisque operum.

These so-called Claudian letters are discussed by Corsen, *Aussprache d. Lat. Sprache*, I, pp. 26 f., and by Bücheler, *De Ti. Claudio Grammatico*, Elberfeld, 1856. Cf. Tac. *Ann.* XI, 14. There is abundant epigraphical evidence for the character ɹ to represent consonantal u (*e.g.* *C.I.L.* VI, 355, 2034, etc.), and for the character ʃ to represent the sound midway between i and u (*e.g.* the well-known inscription in the Capitoline Museum, *C.I.L.* VI, 553). No certain example exists of the letter ɔ, to represent the sound of the Greek letter Ψ.

II. PASSAGES REFERRING TO INSCRIPTIONS THAT SEXTONIUS MAY VERY LIKELY HAVE EXAMINED

Caesar, 85

(Plebs) postea solidam columnam prope viginti pedum lapidis Numidici in foro statuit scripsitque: Parenti Patriae. Apud eam longo tempore sacrificare, vota suscipere, controversias quasdam interposito per Caesarem iure iurando distrahere perseveravit.

Whether this column was still anywhere to be seen in Suetonius's time, we do not know. The last sentence, *Apud eam . . . perseveravit*, seems to point towards the hypothesis that the plebs had ceased to offer sacrifice, to make vows, etc., in the presence of the column. From a reference of Cicero (*ad Att.* XIV, 15, 2) it would appear that the column had been removed, but it may have been preserved.¹ The inscription is worded differently Cic. *ad Fam.* XII, 3, *Parenti optimo merito*.

Caligula, 15

De sororibus auctor fuit, ut omnibus sacramentis adiceretur: *neque me liberosque meos cariores habeo quam Gaium habeo et sorores eius*; item relationibus consulum: *quod bonum felixque sit C. Caesari sororibusque eius*.

The formula, *neque me liberosque meos cariores habeo quam Gaium habeo et sorores eius*, has, so far as I know, no inscriptional authority. But *quod bonum felixque sit C. Caesari sororibusque eius* was proposed by Mommsen (*Eph. Epig.* V, p. 158), as a conjectural restoration of the mutilated passage in the Acta of the Fratres Arvales. It was restored differently by Henzen (*C.I.L.* VI, 2028^b = ed. Henzen, p. xlii). On the oath taken in the name of the Emperor Caligula, see, in general, *Eph. Epig.* V, pp. 154 f. Cf. Dio Cass. LIX, 3.

Caligula, 24

Tres gladios in necem suam praeeparatos Marti Ultori, addito elogio, consecravit.

Caligula, 41

Eius modi vectigalibus indictis neque propositis, cum per ignorantiam scripturae multa commissa fierent, tandem flagitante populo proposuit quidem legem, sed et minutissimis litteris et angustissimo loco, uti ne cui describere liceret.

Claudius, 1

Nec contentus elogium tumulo eius (Drusi) versibus a se compositis insculpsisse, etiam vitae memoriam prosa oratione composuit.

One wonders if Suetonius did not make use of this *elogium* in writing the first chapter of the life of Claudius. Perhaps,

¹ Cf. Baumgarten-Crusius, I, p. 155, *sed potuit manere loco, ubi fuerat columna, sanctitas quaedam, donec Augustus, teste Appiano, templum ibi extruxit*.

however, the words *versibus a se compositis* should lead us to infer that Suetonius's source for his statement was purely literary. Similar elogia were, very likely, those of L. and C. Caesar (*C.I.L.* VI, 894, 895).

Nero, 10

Recitavit et carmina, non modo domi sed et in theatro, tanta universorum laetitia, ut ob recitationem supplicatio decreta sit, eaque pars carminum aureis litteris Iovi Capitolino dicata.

An *oratio* inscribed upon a silver column is reported by Xiphilinus, LXI, 3. Dio Cassius (XLIV, 7) states that a decree, passed as a mark of honor to Caesar, was inscribed in gilt letters upon a silver pillar.

Galba, 2

Neroni Galba successit nullo gradu contingens Caesarum domum, sed haud dubie nobilissimus magnaue et vetere prosapia, ut qui statuarum titulis pronepotem se Quinti Catuli Capitolini semper ascripserit.

Q. Lutatius Catulus, cos. 78 B.C. (*C.I.L.* VI, 1314), well known as a firm supporter of Cicero in suppressing the conspiracy of Catiline, won the cognomen Capitolinus by his dedication of the temple of Jupiter Capitolinus, destroyed by fire in 83 B.C. (Tac. *Hist.* 3, 72). No inscription is extant in which Galba is called *pronepos* of Catulus.¹ Cp. Plut. *Galba*, 3.

Vitellius, 3

Defunctum (L. Vitellium, Imp. A. Vitelli patrum) senatus publico funere honoravit, item statua pro rostris cum hac inscriptione: pietatis immobilis erga principem.

No such inscription is extant, or is mentioned by Tacitus.

Vespasianus, 1

Locus etiam ad sextum miliarium a Nursia Spoletium euntibus in monte summo appellatur Vespasiae, ubi Vespasiorum complura monumenta extant, magnum indicium splendoris familiae et vestutatis.

This refers, I think, rather to buildings, etc., that the Vespasii had constructed than to tituli. See the notes on *C.I.L.* IX, 4541.

¹ Popillia, the mother of Catulus, had, as second husband, L. Iulius Caesar, the grandfather of L. Iulius Caesar who was consul in 90 B.C.

Domitianus, 5, 13

Plurima et amplissima opera incendio absumpta restituit, in quis et Capitolium, quod rursus arserat; sed omnia sub titulo tantum suo ac sine ulla pristini auctoris memoria.

Ianos arcusque cum quadrigis et insignibus triumphorum per regiones urbis tantos ac tot extruxit, ut cuidam Graece inscriptum sit: *arci*.

The text in the latter passage is not sound (see Roth, ed. Suet. p. 1), a condition no doubt due to the similarity of the word *arci* (*ἀρκεί*) to *arcus*. We should probably understand from this passage, however, that *arci* was not cut upon the public monument as an inscription, but was rather simply written or scratched upon it.

III. PASSAGES REFERRING TO INSCRIPTIONS THAT, IN ALL PROBABILITY, WERE NOT EXAMINED BY SUETONIUS PERSONALLY

Caesar, 80

Subscripsere quidam Luci Bruti statuæ: Utinam viveres!

This, again, was rather written than cut on the base of the statue. There exists, to be sure, an inscription worded thus, but it has been shown to be false, *C.I.L.* VI, Part V, *1^m. Cf. Plut. *Brut.* 9.

Caesar, 81

Paucos ante menses, cum in colonia Capua deducti lege Iulia coloni ad extruendas villas vetustissima sepulchra dissicerent, idque eo studiosius facerent, quod aliquantum vasculorum operis antiqui scrutantes reperiebant, tabula aenea in monumento, in quo dicebatur Capys conditor Capuae sepultus, inventa est, conscripta litteris verbisque Graecis hac sententia, *Quandoque ossa Capiis detecta essent, fore ut Iulo prognatus manu consanguineorum necaretur magnisque mox Italiae claudibus vindicaretur*. Cuius rei, ne quis fabulosam aut commenticiam putet, auctor est Cornelius Balbus, familiarissimus Caesaris.

Such an inscription, of course, hardly existed, though there is no good reason to doubt that ancient tombs were found, in which there might have been some inscribed objects. Cf. *C.I.L.* X, p. 365: "Sed, ut par est, non magis defuerunt, qui clarae urbi Troianum quendam Capyn conditorem adsererent eumque cum domo ea quae Romam condidisse fertur aliqua ratione coniunctum, in qua opinione et antiquissimus Hecataeus fuisse

dicitur (fr. 27 Muell.) et posteriores complures (Coelius, *apud Servium ad Aen.* 10; Ovidius, *fast.* 4, 45; Dionys. I, 73; Suetonius, *Caes.* 81; *al.*).” It should be noted that the inscription is quoted in indirect discourse, and that Suetonius, by his last statement, *cuius rei . . . Caesaris*, implies that the truthfulness of the account had been questioned.

Augustus, 12

Et quo magis paenitentiam prioris sectae approbaret, Nursinos grandi pecunia et quam pendere nequirent multatos extorres oppido egit, quod Mutinensi acie interemptorum civium tumulto publice extracto ascripserant, pro libertate eos occubuisse.

Caligula, 8

(Plinius) addit etiam pro argumento, aras ibi ostendi inscriptas: ob Agrippinae puerperium . . . Nec Plini opinionem inscriptio arae quicquam adiuverit, cum Agrippina bis in ea regione filias enixa sit, et qualiscumque partus sine ullo sexus discrimine puerperium vocetur, quod antiqui etiam puellas pueras, sicut et pueros puellios dictitarent.

The inscription has never been found. See below, pp. 58 ff.

Nero, 41

Leviterque modo in itinere frivolo auspicio mente recreata, cum adnotasset insculptum monumento militem Gallum ab equite R. oppressum trahi crinibus, ad eam speciem exiluit gaudio caelumque adoravit.

Nero, 45

Statuae eius a vertice cirrus appositus est cum inscriptione Graeca, *nunc demum agona esse, et traderet tandem!* Alterius collo ascopera deligata, simulque titulus: *Ego quid potui? sed tu culleum meruisti.* Ascriptum et columnis, iam Gallos eum cantando excitasse.

These inscriptions, as the context shows, were written, and not of a permanent character.

Nero, 47

Duos scyphos gratissimi usus, quos Homeros a caelatura carminum Homeri vocabat, solo inlisit.

Vitellius, 10

Pari vanitate atque insolentia lapidem memoriae Othonis inscriptum intuens, *dignum eo Mausoleo* ait, pugionemque, quo is se occiderat, in Agrippinensem coloniam misit Marti dedicandum.

With this passage we may compare Plutarch's statement (*Otho*, 18).

Vespasian, 1

Manebantque imagines a civitatibus ei positae sub hoc titulo: Καλῶς τελωνίσαντι.

An inscription, | ΚΑΛΩΣ ΤΕΛΩΝΗCΑΝΤΙ ΑΝΙ, inscribed upon the base of a statue believed to be that of Vespasian, was reported first by Boissard, *Ant. Rom.* I, Tab. 51, then by Montfaucon, *Ant. Expl.* III, 1, 10, Tab. 1, afterwards by Franz, *C.I.G.* 5897, and recently by Kaibel, *Inscr. Graec. Sicil. et Ital.* 123*, who regards it as spurious.

Titus, 4

Tribunus militum et in Germania et in Britannia meruit summa industriae, nec minore modestiae fama, sicut apparet statuarum et imaginum eius multitudine ac titulis per utramque provinciam.

Not a single honorary inscription erected to Titus has thus far been found in Britain. The only three from that country that mention his name (*C.I.L.* VII, 1204, 1205; *Eph. Epig.* VII, 1121) are on pigs of lead. From Germany, only one is reported by Brambach, *C.I.Rh.*, Add. 2040. Suetonius knew of the existence of these tituli, very likely from the reports of the transactions of the Senate, preserved in the public archives.

IV. PASSAGES REFERRING IN A GENERAL WAY TO INSCRIPTIONS THEMSELVES, OR TO MONUMENTS OFTEN INSCRIBED

Reference is made in numerous passages to monuments that are, as a rule, inscribed, or, in a general way, to inscriptions. The most important instances of the latter are:

Caesar, 28

Ac mox, lege iam in aes incisa et in aerarium condita, corrigeret errorem.

With this compare *Vesp.* 8, below.

Augustus, 31

Itaque et opera cuiusque manentibus titulis restituit.

Augustus, 97

Cum lustrum in campo Martio magna populi frequentia conderet, aquila eum saepius circumvolavit, transgressaque in vicinam aedem super nomen Agrippae ad primam litteram sedit.

This building was perhaps the Pantheon; see the inscription, *C.I.L.* VI, 896. Cf. Dio Cass. LIV, 28.

Augustus, 97

Sub idem tempus ictu fulminis ex inscriptione statuæ eius prima nominis littera effluxit.

Cf. Dio Cass. LIV, 29.

Caligula, 14

Non defuerunt qui depugnatos se armis pro salute aegri quique capita sua titulo proposito voverent.

Caligula, 31

Statuas virorum illustrium, ab Augusto ex Capitolina area propter angustias in campum Martium coulatas, ita subvertit atque disiecit ut restitui salvis titulis non potuerint.

Vespasianus, 8

Aerearumque tabularum tria milia, quae simul conflagraverant, restituenda suscepit, undique investigatis exemplaribus; instrumentum imperii pulcherrimum ac vetustissimum, quo continebantur paene ab exordio urbis senatus consulta, plebi scita de societate et foedere ac privilegio cuicumque concessis.

From this passage we may infer that Suetonius was acquainted with monuments of the character described; see Mommsen, *Staatsrecht*, I³, p. 257, n. 2. Cf. *Caes.* 28 (above, p. 53), and *Aug.* 94: *curasse ne senatus consultum ad aerarium deferretur.*

Domitianus, 15

Atque etiam e basi statuæ triumphalis titulus excussus vi procellae in monumentum proximum decidit.

Domitianus, 23

Novissime eradendos ubique titulos abolendamque omnem memoriam decerneret.

The name of Domitian was not in all cases erased from his tituli, but very often. See *C.I.L.* II, 2477, III, 312, 4013, VI, 398, etc. Cf. Macrobian *Sat.* I, 12, 37.

Important references to monuments often provided with inscriptions are:

Augustus, 1

Ostendebatur ara Octavio consecrata.

Augustus, 31

Statuas omnium triumphali effigie in utraque fori sui porticu dedicavit.

Of the inscriptions cut upon these statues, the so-called *elogia*, some have been preserved, *C.I.L.* I², pp. 185 f.

Augustus, 59

Medico Antonio Musae, cuius opera ex ancipiti morbo convaluerat, statuam aere conlato iuxta signum Aesculapi statuerunt.

Tiberius, 5

Et quod mox simulacrum Felicitatis ex S. C. publicatum ibi sit.

Caligula, 7

Quorum (Germanici et Agrippinae liberorum) duo infantes adhuc rapti, unus iam puerascens insigni festivitate, cuius effigiem habitu Cupidinis in aede Capitolinae Veneris Livia dedicavit.

Claudius, 1

Praeterea senatus inter alia complura marmoreum arcum cum tropaeis via Appia (Druso) decrevit.

Cf. Cohen, *Méd. Imp.* I, pp. 220, 221, nos. 1-6; Eckhel, *Doctrina Num.* VI, pp. 176, 177, for coin type representing this monument. See also Jordan, *Topogr. d. Stadt Rom*, I, 1, p. 365, n. 38.

Claudius, 2

Claudius natus est Iulio Antonio, Fabio Africano cons. Kl. Aug. Luguduni, eo ipso die quo primum ara ibi Augusto dedicata est.

See Gardthausen, *Augustus*, II, 2, pp. 364 ff., and cf. Strabo, IV, 3, p. 192.

Claudius, 11

Tiberio marmoreum arcum iuxta Pompei theatrum, decretum quidem olim a senatu verum omisum peregit.

Nero, 50

Reliquias (Neronis) Ecloge et Alexandria nutrices cum Acte concubina gentili Domitiorum monumento condiderunt, quod prospicitur e campo Martio impositum colli Hortulorum. In eo monumento solum porphyretici marmoris, superstante Lunensi ara, circumseptum est lapide Thasio.

Beyond doubt, Suetonius saw and examined this monument, and an inscription upon it may have been the source of his information regarding those who paid the last rites of burial to

Nero. For the location of the monument, see Lanciani, *Forma Urbis Romae* (Mediol. 1894), Fasc. II, Tab. I, and *Beschreibung der Stadt Rom*, III, 2, pp. 569 ff.

Vespasianus, 12

Quin et conantis quosdam originem Flavii generis ad conditores Reatinos comitemque Herculis, cuius monumentum extat Salaria via, referre irrisit ultro.

V. PASSAGES THAT EXHIBIT A RESEMBLANCE TO EXISTING INSCRIPTIONS

I have found three passages of this character, but the resemblance cannot be considered specially significant.

Augustus, 57

Equites R. natalem eius sponte atque consensu biduo semper celebrarunt. Omnes ordines in lacum Curti quot annis ex voto pro salute eius stipem iaciebant, item Kal. Ian. strenam in Capitolio, etiam absenti, ex qua summa pretiosissima deorum simulacra mercatus, vicatim dedicabat, ut Apollinem Sandaliarium et Iovem Tragoedum aliaque.

With this may be compared the inscription published in *Notiz. d. Scavi*, 1888, p. 224: IMP · CAES#####DIVI · F · AVGVST | PONTIF · MAXIMVS · COS · XI | TRIBVNICIA · POTEST · XIII | EX STIPE · QVAM · POPVLVS · ROMANVS | K · IANVARIIS · APSENTI · EI · CONTVLIT | IVLIO · ANTONIO · AFRICANO · FABIO · COS | MERCVRIO · SACRVM. See also *C.I.L.* VI, 456-458.

Claudius, 20

Claudiae aquae gelidos et uberes fontes, quorum alteri Caeruleo, alteri Curtio et Albudigno nomen est, simulque rivum Anienis novi lapideo opere in urbem perduxit, divisitque in plurimos et ornatissimos lacus.

With this we may compare the inscription which is still to be seen above the so-called *Porta Maggiore*, in the wall of Aurelian, at Rome, *C.I.L.* VI, 1256: TI · CLAVDIVS DRVSI F · CAISAR AVGVSTVS GERMANICVS PONTIF · MAXIM · | TRIBVNICIA POTESTATE XII COS · V IMPERATOR XXVII PATER PATRIAE | AQVAS CLAVDIAM EX FONTIBVS QVI VOCABANTVR CAE- RVLEVS ET CVRTIVS A MILLIARIO XXXXV | ITEM ANIENEM NOVAM A MILLIARIO LXII SVA IMPENSA IN VRBEM PER- DVCENDAS CVRAVIT.

The additional matter in Suetonius's account points to another source. Cf. Pliny, *N. H.* 36, 121, 122. Frontinus, *De aquaeduct.* 1, 14, reads *Albudinus*, perhaps more correctly.

Claudius, 21

Fecit et Saeculares, quasi anticipatos ab Augusto nec legitimo tempori reservatos, quamvis ipse in historiis suis prodat, intermissos eos Augustum multo post, diligentissime annorum ratione subducta, in ordinem redegisse. Quare vox praeconis irrita est, invitantis more sollemni ad ludos, quos nec spectasset quisquam nec spectaturus esset, cum superessent adhuc qui spectaverant, et quidam histrionum producti olim tunc quoque producerentur.

Compare l. 56 of the familiar inscription commemorating the Ludi Saeculares, as celebrated by Augustus (*Eph. Epig.* VIII, p. 229); *has neque ultra quam semel ulli mor[talium eos spectare licet]*. Cf. also Zosimus, 2, 5: *περιόντες οἱ κήρυκες, εἰς τὴν ἑορτὴν συνίεναι πάντες ἐκέλευον ἐπὶ θέαν ἣν οὔτε πρότερον εἶδον οὔτε μετὰ ταῦτα θεάσονται*; and Herodianus, 3, 8, 10, *καλοῦντες ἥκειν καὶ θεάσασθαι πάντας ἃ μῆτε εἶδον μῆτε ὄψονται*. The passage in Suetonius may possibly be taken from a *Senatus-Consultum* passed in the time of Claudius, but worded like the one promulgated in connection with the celebration of Augustus.

VI. MISCELLANEOUS REFERENCES

Caesar, 80

Peregrinis in senatum allectis, libellus propositus est: *Bonum factum: ne quis senatori novo curiam monstrare relit!*

Vitellius, 14

Statim libellus propositus est, *et Chaldaeos dicere, bonum factum, ne Vitellius Germanicus intra eundem Calendarum diem usquam esset*.

Bonum factum, abbreviated B·F, occurs in inscriptions; cf. *Bull. Com.* 1882, p. 159, and 1884, p. 58; see also the Acta of the Ludi Saeculares, celebrated by Augustus, l. 80.

Augustus, 29

Multaque a multis tunc extracta sunt, sicut . . . a Munatio Planco aedes Saturni.

With these words compare *C.I.L.* X, 6087.

Tiberius, 20

Dedicavit et Concordiae aedem, item Pollucis et Castoris suo fratrisque nomine, de manubiis.

One wonders if Suetonius did not know this from an inspection of the dedicatory inscriptions of the respective temples.

Augustus, 50

In diplomatibus libellisque et epistolis signandis initio sphinge usus est, mox imagine Magni Alexandri, novissime sua, Dioscuridis manu sculpta, qua signare insecuti quoque principes perseverarunt.

Compare the Acta of the Fratres Arvales for February 26, of the year 118 A.D. (*C.I.L.* VI, p. 537).

Is it not possible that, in writing the account of the life of Germanicus (*Cal.* 1-7), Suetonius may have consulted the inscription, *C.I.L.* VI, 911, or an official copy of it?

Caligula, 8

This is interesting in showing how Suetonius has treated the conflicting testimony of historians, of an inscription, and of the Acta.

C. Caesar natus est pridie Kl. Sept. patre suo et C. Fonteio Capitone coss. Ubi natus sit, incertum diversitas tradentium facit. CN. Lentulus Gaetulicus Tiburi genitum scribit, Plinius Secundus in Treveris, vico Ambitarvio supra Confluentes; addit etiam pro argumento aras ibi ostendi inscriptas: ob Agrippinae puerperium. Versiculi imperante mox eo divulgati apud hibernas legiones procreatum indicant:

*In castris natus, patriis nutritus in armis,
Iam designati principis omen erat.*

Ego in actis Anti editum invenio. Gaetulicum refellit Plinius quasi mentitum per adulationem, ut ad laudes juvenis gloriosique principis aliquid etiam ex urbe Herculi sacra sumeret, abusumque audentius mendacio, quod ante annum fere natus Germanico filius Tiburi fuerat, appellatus et ipse C. Caesar; de cuius amabili pueritia immaturoque obitu supra diximus. Plinium arguit ratio temporum. Nam qui res Augusti memoriae mandarunt, Germanicum exacto consulatu in Galliam missum consentiunt, iam nato Gaio.

Nec Plini opinionem inscriptio arae quicquam adiuvit, cum Agrippina bis in ea regione filias enixa sit, et qualiscumque partus sine ullo sexus discrimine puerperium vocetur, quod antiqui etiam puellas pueras, sicut et pueros puellulos dictarent. Extat et Augusti epistula, ante paucos quam

obiret menses ad Agrippinam neptem ita scripta de Gaio hoc (neque enim quisquam iam alius infans nomine pari tunc supererat): *Puerum Gaium XV. Kl. Iun. si dū volent ut ducerent Talarius et Asillius, heri cum iis constitui. Mitto praeterea cum eo ex servis meis medicum, quem scripsi Germanico si vellet ut retineret. Valebis, mea Agrippina, et dabis operam ut valens pervenias ad Germanicum tuum.* Abunde parere arbitror, non potuisse ibi nasci Gaium, quo prope bimulus demum perductus ab urbe sit. Versiculorum quoque fidem eadem haec elevant et eo facilius, quod ii sine auctore sunt. Sequenda est igitur, quae sola restat publici instrumenti auctoritas, praesertim cum Gaius Antium, omnibus semper locis atque secessibus praelatum, non aliter quam natale solum dilexerit tradaturque etiam sedem ac domicilium imperii taedio urbis transferre eo destinasse.

Thus Suetonius values the testimony of the *acta* highest. Cf. Tac. *Ann.* I, 41, confirming the evidence of the inscription. See above, p. 52.

Caligula, 15

The *tituli sepulcrales* of Agrippina and of Nero are extant (*C.I.L.* VI, 886, 887), but it is impossible to assert that Suetonius saw them.

Caligula, 23

Agrippae se nepotem neque credi neque dici ob ignobilitatem eius volebat, suscensebatque, si qui vel oratione vel carmine imaginibus eum Caesarum insererent.

See Cohen, *Méd. Imp.* I, p. 241, n. 31, and De Ruggiero, *Diz. Epigr.* II, p. 32 (*fn.*).

Claudius, 17

Ac sine ullo proelio aut sanguine intra paucissimos dies parte insulae in deditionem recepta, sexto quam profectus erat mense Romam rediit, triumphavitque maximo apparatu.

Smilda¹ thinks that Suetonius seems here to have followed the *titulus triumphalis*, *C.I.L.* VI, 920. Cf. note on *Vesp.* 4, p. 60.

Claudius, 24

Triumphalia ornamenta Silano, filiae suae sponso, nondum puberi dedit.

With this compare *C.I.L.* XIV, 2500.

¹ *C. Suetoni Tranquilli vita Divi Claudii*, Groningae, 1896, p. 79.

Claudius, 25

Equestris militias ita ordinavit, ut post cohortem alam, post alam tribunatum legionis daret.

With this compare the note of Cagnat (*Cours d'épig. latine*, p. 110), "cet ordre hiérarchique, qui n'est pas confirmé par les inscriptions de cette époque, fut, en tout cas, bientôt interverti"; but *C.I.L.* XIV, 2960 seems to be an example. So, too, what follows: *stipendiaque instituit et imaginariae militiae genus, quod vocatur supra numerum, quo absentes et titulo tenus fungerentur*, is hardly confirmed by the inscriptions; but cf. Mommsen, *Staatsrecht*, III, p. 552, n. 1. On the *milites supernumerarii*, cf. Marquardt, *Organisation Mil.* (Paris, 1891), p. 223, n. 4.

It is interesting also to note here *Nero, 25*: *item statuas suas etharoedico habitu (qua nota etiam nummum percussit)*.

For coins with this type, see Cohen, *Méd. Imp.* I, p. 292, n. 196-203.

Vespasianus, 4

Claudio principe Narcissi gratia legatus legionis in Germaniam missus est; inde in Britanniam translatus, tricies cum hoste conflixit. Duas validissimas gentes superque viginti oppida et insulam Vectem Britanniae proximam in dicionem redegit, partim Auli Plauti legati consularis partim Claudii ipsius ductu.

"Worte denen," says Hübner, referring to this passage (*Hermes*, XVI, p. 528, n. 5), "wohl der Text einer Triumphalinschrift zu Grunde liegt."

There are some passages which, although they may have been taken from books as sources, still are expressed in language peculiar to inscriptions, e. g. *Aug. 30*: *Aedes sacras vetustate conlapsas aut incendio absumptas refecit*; *Cal. 21*: *Syracensis conlapsa vetustate moenia deorumque aedes refectae*; *Claud. 25*: *templumque in Sicilia Veneris Erycinae vetustate conlapsum ut ex aerario pop. R. reficeretur, auctor fuit*; *Aug. 59*: *statuam aere conlato . . . statuerunt*; *Caes. 26*: *Forum de manubiis*¹ *inchoavit*, etc.

¹ Cf. *Aug. 30*, *ex manubiali pecunia*, which is not the language of inscriptions.

VII. THE COGNOMINA AND TITLES OF THE EMPERORS,
OCCURRING IN SUETONIUS'S NARRATIVE, AS CONFIRMED
BY THE INSCRIPTIONS

I have investigated this phase of the subject, so that, if possible, it might appear whether, in obtaining his knowledge of these titles or cognomina, Suetonius made use of literary evidence only, or corroborated what he found in written documents, by an inspection also of epigraphical evidence.

Caesar, 76

Non enim honores modo nimios recepit; continuum consulatum, perpetuam dictaturam, praefecturamque morum, insuper praenomen Imperatoris, cognomen Patris patriae.

Of these offices, we have inscriptional evidence for only *dictator*, *C.I.L.* II, 5439, IX, 2563, 4191; for *pater patriae*, IX, 34; and *imperator*, IX, 2563, II, 5439, c. 104, where *imperator* is not a praenomen. Cf. Josephus, *Ant. Jud.* 14. 10. 2; 14. 10. 7, and on the other hand, *C.I.G.* 3668, *C.I.L.* I, p. 398 (iv. non. Aug.). See in general *C.I.L.* I, pp. 451-453, and Mommsen, *Staatsrecht*, II, p. 767, n. 1.

Augustus, 7

Infanti cognomen Thurino inditum est.

See above, pp. 45 ff.

Augustus, 7

Postea Gai Caesaris et deinde Augusti cognomen assumpsit.

This does not need to be confirmed by inscriptions (cf. Cagnat, *Cours d'épigr. lat.* p. 171).

Augustus, 58

Patris patriae cognomen universi repentino maximoque consensu detulerunt ei.

Cf. Cagnat (*l.c.*), and *Fast. Praen.*, non. Febr. (*C.I.L.* I², p. 309).

Tiberius, 17

Censuerunt etiam quidam ut Pannonicus, alii ut Invictus, nonnulli ut Pius cognominaretur. Sed de cognomine intercessit Augustus, eo contentum repromittens, quod se defuncto suscepturus esset.

None of the tituli of Tiberius show these cognomina, not even those erected after the death of Augustus. See *C.I.L.* IX, p. 698, n. to 4192, May 26.

Tiberius, 26, 67

Praenomen quoque imperatoris cognomenque patris patriae, et civicam in vestibulo coronam recusavit; ac ne Augusti quidem nomen, quamquam hereditarium, ullis nisi ad reges ac dynastas epistolis addidit.

Ideoque, ut imperium inierit, et patris patriae appellationem . . . recusasse.

The praenomen of *Imperator* nowhere occurs in the inscriptions of Tiberius of Italian provenance, but appears in three entire inscriptions from Africa (*C.I.L.* VIII, 685, 10023; *Eph. Epig.* V, 1436; and in two that are mutilated, VIII, 5205, 10018 (perhaps also 10492).

There has been found, so far as I know, no Latin titulus of Tiberius in which he is called *pater patriae* (see *C.I.G.* 2087), although Cagnat (p. 160) makes the statement that all the Emperors bore this title; but cf. Mommsen, *Staatsrecht*, II, pp. 779, 780. The phrase in § 67 (*existimant quidam*) seems to refer to some written source of information. Suetonius's statement is corroborated by Tac. *Ann.* I, 72; Dio Cass. LVII, 8.

Tiberius is often called *Augustus* in inscriptions, although it is to be noted here that Suetonius's source was the letters of the Emperor.

Tiberius, 50

Tulit etiam perindigne actum in senatu, ut titulus suis quasi Augusti, ita et Liviae filius adiceretur. Quare non parentem patriae appellari, non ullum insignem honorem recipere publice passus est.

Tiberius's *filiation* is nowhere expressed thus in his inscriptions, although Livia is occasionally called *mater Ti. Caesaris*, as in *C.I.L.* II, 2038; IX, 3304; X, 7340, 7501; *Eph. Epig.* IV, 366. There is no epigraphical evidence for Livia being *parens patriae*, but she has the title of *mater patriae* on the coins of the colonies. See Eckhel, *Doctrina Num.* VI, p. 155.

Caligula, 22

Compluribus cognominibus adsumptis (nam et pius et castrorum filius et pater exercituum et optimus maximus Caesar vocabatur) . . . et quidam eum Latiarem Iovem consalutarunt.

None of these cognomina are, of course, found in the tituli of Caligula, while in our passage no mention is made of the cognomen of Germanicus which alone has epigraphical evidence; so, too, the fact that Caligula refused the praenomen of Imperator is passed by in silence.

Claudius, 1

Germanici cognomen (senatus decrevit) ipsi (Druso patri) posterisque eius.

Drusus is often called Germanicus in his tituli, Claudius nearly everywhere; but it is clear that Suetonius knew this from a decree of the Senate.

Claudius, 12

Praenomine Imperatoris abstinuit.

This is generally confirmed by the monuments; exceptions are in the Acta of the Fratres Arvales, *C.I.L.* VI, p. 467^e, l. 10 f.

Nero, 8

Ex immensis, quibus cumulabatur, honoribus tantum Patris patriae nomine recusato propter aetatem.

Nero assumed the title at the end of 55 A.D. (Egbert, *Latin Inscriptions*, p. 128), but *quod notabile est*, it does not occur in the *privilegium* of the year 60, July 2 (*C.I.L.* III, p. 845).

Galba, 4

Adoptatusque (Galba) a noverca sua Livi nomen et Ocellae cognomen assumpsit, mutato praenomine; nam Lucium mox pro Servio usque ad tempus imperii usurpavit.

The inscriptions of Galba are, of course, very few in number, especially those that were erected before he was saluted Emperor, so that upon no monument inscribed in Latin is he called Lucius Livius Ocella. In *C.I.G.* 4957, however, his name is given Λούκιος Λίβιος Σεβαστὸς Σουλπίκιος Γάλβας Αὐτοκράτωρ and Λούκιος Λείβιος Σουλπίκιος Γάλβας Καῖσαρ Σεβαστὸς Αὐτοκράτωρ. See *C.I.L.* VI, 1446, and Eckhel, *Doctrina Num.* VI, pp. 299, 300.

Galba, 4, Ser. Galba Imp.

Otho, 2, Otho imperator.

Vit. 3, A. Vitellius L. filius Imperator.

The praenomen *Imperator* regularly precedes the nomen on the coins of Otho (Cohen, *Méd. Imp.* I, pp. 352-354), and regularly follows the nomen on the coins of Vitellius (Cohen, *l.c.* pp. 355 f.); on the coins of Galba, however, it is very often put after the nomen, sometimes also before it (Cohen, pp. 319 ff.; Eckhel, *op. cit.* pp. 291, 292). This order is confirmed by the few existing inscriptions, *C.I.L.* III, p. 1958; X, 770, 771; VI, 929, pp. 496, 498; XIV, 2496^a (cf. *Bull. dell' Inst.* 1871, p. 21); with the exception of *C.I.L.* X, 8016, where see the note. Cf. Mommsen, *Staatsrecht*, II, p. 769, n. 5, and Eckhel, *op. cit.* VIII, p. 349, § 1.

Vitellius, 8

Cognomen Germanici delatum ab universis cupide recepit, Augusti distulit, Caesaris in perpetuum recusavit.

In the inscriptions Vitellius is regularly called *Germanicus*; he is called *Augustus* in the mutilated inscription, *C.I.L.* XIV, 2496^a, if it has been rightly restored by Dessau (see Index, III), and also in the fragmentary Acta of the Fratres Arvales, a.d. III non. Iun., *C.I.L.* VI, p. 499, Tab. II, l. 12; yet he is not given this title in the Acta of IIII kal. Iun., and it is not found upon coins (Eckhel, *op. cit.* VI, p. 309). There is no epigraphical evidence that Vitellius bore the cognomen *Caesar*, with the exception of the mutilated inscription, X, 8016, a TVRRE XLIIII | imP · A · VITELLIVS · CIIII. Cf. Tac. *Hist.* 1, 62; 2, 62; 3, 58.

Vitellius, 11

Seque perpetuum consulem (ordinavit).

This is confirmed by *C.I.L.* VI, 929, A · VITELLIVS | · IMPERATOR · | COS · PERP. Cf. Mommsen, *Staatsrecht*, II, p. 1097, n. 2.

Vespasianus, 12

Ac ne tribuniciam quidem potestatem * patris patriae appellationem nisi sero recepit. [Roth supplies *aut* before *patris*.]

Vespasian received the *tribunica potestas* for the first time on July 1, 69 A.D. The inscription in which he is first called *pater patriae*, *C.I.L.* X, 8005, belongs to the year 70 (some time before July 1), and yet in the *militum privilegium* VI

(*C.I.L.* III, p. 849), dated March 7 of the same year, he does not have this title. But this is not important, for, although the Emperor is named *pater patriae* in the *privilegia* (*C.I.L.* III, pp. 850, 1959) of April 5, 71 A.D., he is not in later inscriptions, *C.I.L.* X, 3828 (77 A.D.), 3829 (78 A.D.), XIV, 3485.

Titus, 6

Triumphavit cum patre censuramque gessit una, eidem collega et in tribunicia potestate et in septem consulatibus fuit.

Titus was censor together with his father in the years 73 and 74 A.D. (Mommsen, *Staatsrecht*, II, p. 338, n. 1). Also, having had his father as colleague throughout, he was holding the *tribunicia potestas* for the eighth time, and was consul for the seventh time, when Vespasian died on July 23, 79 A.D.

Domitianus, 13

Pari arrogantia, cum procuratorum suorum nomine formalem dictaret epistulam, sic coepit: *Dominus et deus noster hoc fieri iubet*. Unde institutum posthac, ut ne scripto quidem ac sermone cuiusquam appellaretur aliter. . . . Consulatus septemdecim cepit, quot ante eum nemo; ex quibus septem medios continuavit, . . . Germanici cognomine assumpto.

In the inscriptions, at any rate, Domitian is nowhere named *Dominus et Deus*. See Mommsen, *Staatsrecht*, II, pp. 760-763; Eckhel, VIII, pp. 364 fol.; and cf. *Aug.* 53, *Tib.* 27.

It is shown by epigraphic evidence also that Domitian, surpassing all previous records, held the consulship seventeen times, and from the year 82 to 88 continuously. In the year 84 he assumed the cognomen *Germanicus*, which occurs generally in his inscriptions.

It is necessary merely to refer to the other consulships and censorships mentioned by Suetonius. See *Caes.* 76; *Cal.* 17; *Claud.* 14, 16; *Vit.* 2; *Vesp.* 4, 8.

If we consider it certain that the resemblances existing between the text of Suetonius and the Monumentum Ancyranum were due to the fact that the historian made extracts, not from the inscription itself, but from an original document providing for its erection, or a written copy of that document,

there are only four passages (*Aug.* 7; *Cal.* 23; *Tib.* 5; *Claud.* 41) which clearly show that Suetonius made use of epigraphic sources.

In the case of the other passages, although the account of Suetonius often agrees with what is found in inscriptions (matter, however, which could be taken as well from literary sources), there are yet some passages which prove that Suetonius not only did not make use of the most ordinary and commonly occurring tituli, but did not even read them carefully; if he had done so, we should hardly expect him to make the statement he does with regard, for instance, to the praenomen *Augustus* being refused by Tiberius (*Tib.* 26), and with regard to other matters, such as those dealt with in *Tib.* 50 (see above, p. 62); *Nero*, 8 (p. 63); *Galba*, 2 (p. 50).

On the other hand, we cannot know definitely how many inscriptions, of which he has made no mention, Suetonius may have examined and used as sources. In one instance, *Cal.* 8 (see above, p. 58), it is noteworthy that he has quoted an inscription as deserving some consideration.

Suetonius, as we have seen, held the important position of *epistolarum magister* under Hadrian (*Spart.* 12, 3), and so, doubtless, had access to all important state documents and writings that were preserved in various archives. A wealth of written historical material was to be found in these archives and in the libraries; he was not therefore under the necessity of consulting epigraphic monuments directly. In these times, however, the amount of documentary evidence available is comparatively small, and we must rely much more largely upon inscriptions than the ancients did. Finally, as G. Becker remarks (*J. J.* 81, p. 195), "Suetonius potius grammaticus erat quam rerum scriptor, et Caesarum Vitas eisdem rationibus quibusdam composuit quibus res grammaticas scribebat."¹

WALTER DENNISON.

¹ Cf. H. Lehmann, *Claudius und Nero und ihre Zeit*, Gotha, 1858, pp. 49, 50.

INDEX OF PASSAGES

		PAGE
<i>Caesar</i>	6	28
"	9	28 (2)
"	26	28 (2), 60
"	28	53
"	30	28
"	31	27
"	42	28
"	49	28
"	50	27, 28
"	52	28 (2)
"	55	28 (2)
"	56	28 (5)
"	76	61, 65
"	77	28
"	80	51, 57
"	81	51
"	83	33, 42, 44
"	85	48
"	86	27
<i>Augustus</i>	1	45, 54
"	2	28, 29
"	3	27, 28, 29, 45
"	4	28
"	5	29, 47
"	7	28, 37, 45, 46, 61 (2), 66
"	8	30, 47
"	9	31
"	10	28, 30 (2)
"	11	28
"	12	52
"	13	30
"	15	27
"	16	28
"	17	36
"	21	31, 36 (3), 37 (3), 41, 42 (2), 43
"	22	31, 33, 41, 42
"	23	27
"	24	32
"	26	27, 31, 33
"	27	28, 31 (2), 32 (2), 40 (2), 41, 42 (2)
"	28	28, 37, 43
"	29	34 (3), 35, 42 (3), 43, 57
"	30	34 (2), 35, 42, 43, 60 (2)

	PAGE
<i>Augustus</i> 31	32 (2), 34, 35, 42 (2), 47, 53, 55
" 34	32
" 35	28, 32, 42
" 40	32
" 41	31, 33, 42
" 42	31
" 43	32, 35 (4), 40 (2), 41 (2), 43
" 46	36, 41
" 48	36
" 49	34, 42
" 50	40, 58
" 51	27, 28
" 52	31, 36, 42
" 53	65
" 57	29, 33, 56
" 58	29, 37, 61
" 59	55, 60
" 63	28
" 68	28
" 69	28
" 70	28
" 71	28 (3), 40, 44
" 76	28 (3)
" 77	28
" 79	28
" 85	28
" 86	28, 44
" 87	28, 40 (2), 44
" 88	28, 29, 44
" 92	28
" 94	28 (3), 54
" 97	53, 54
" 99	27
" 101	30, 38-40, 44 (2)
<i>Tiberius</i> 2	47
" 5	27, 29, 47, 55, 66
" 7	47
" 9	27, 36 (2), 41
" 16	36
" 17	61
" 20	58
" 21	28, 29
" 23	33, 44
" 24	27
" 25	47
" 26	62, 66
" 27	65
" 28	27

	PAGE
<i>Tiberius</i> 50	62, 66
" 61	28
" 67	28, 62
" 76	44
<i>Caligula</i> 1-7	58
" 4	27
" 7	41, 55
" 8	27, 28 (2), 29 (2), 47, 52, 58, 66
" 14	54
" 15	49, 59
" 17	65
" 18	41
" 19	29
" 21	60
" 22	62
" 23	27, 28, 46, 48, 59, 66
" 24	49
" 25	27
" 34	54
" 41	49
" 47	27
" 49	41
" 51	29
<i>Claudius</i> 1	29 (2), 49, 55, 63
" 2	28, 47, 55
" 4	28 (3)
" 11	55
" 12	63
" 14	65
" 16	27, 65
" 17	59
" 20	56
" 21	28, 57
" 24	59
" 25	60 (2)
" 33	28
" 38	28 (2)
" 41	28, 29, 48, 66
" 42	28
" 44	27
<i>Nero</i> 8	63, 66
" 10	50
" 23	28
" 24	28
" 25	60
" 29	27

		PAGE
<i>Nero</i>	41	28, 52
"	45	52
"	47	52
"	49	27
"	50	55
"	52	44
<i>Galba</i>	2	50, 66
"	3	29
"	4	63 (2)
<i>Otho</i>	2	63
"	9	27
"	10	29
<i>Vitellius</i>	1	27
"	2	28, 65
"	3	50, 63
"	8	64
"	10	52
"	11	64
"	14	57
<i>Vespasian</i>	1	29, 50, 53
"	4	60, 65
"	8	27, 54, 65
"	12	50, 64
"	16	27
<i>Titus</i>	4	53
"	6	65
<i>Domitian</i>	5	51
"	12	29
"	13	28, 51, 65
"	15	54
"	23	54
<i>De Ill. Gram.</i>	17	47

CRETAN EXPEDITION¹

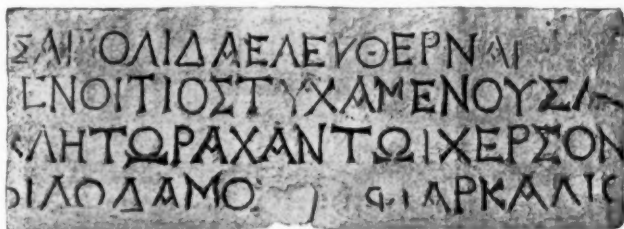
IX

INSCRIPTIONS FROM GORTYNA, LYTTOS, AND LATÓ PROS KAMARA²

It gives me pleasure to contribute to the Cretan Series of the *Journal* some inscriptions which have recently come to light from among the rich archaeological strata of our island. These inscriptions were for the most part found by peasants while at work in the fields, and were copied by me in the course of a visit to the interior in 1897.

GORTYNA

1. Block of common stone found near the so-called *κάτω μύλος* and brought into the garden of Georgios Iliakis at Haghioi Deka. Height, 0.25 m.; length, 0.70 m.; thickness, 0.39 m.; height of letters, 0.038 m. to 0.042 m.



¹ Continued from Vol. I, 1897, p. 312.

² Although the inscriptions here published were not actually discovered by members of the Cretan Expedition of the Institute, it is by the courtesy of Professor Xanthoudidis and the kind offices of Professor Halbherr that the Editors have the privilege of including them in the Cretan Series.—EDITORS.

American Journal of Archaeology, Second Series. Journal of the
Archaeological Institute of America, Vol. II (1898), Nos. 1, 2.

.....
 σαπ(?)ολίδα Ἐλευθερν[αῖος
 Μ]ενοίτιος Τυχαμένους [Α
 Κ]λήτωρ Ἀχάντω Χερσον[άσιος
 Φ]ιλόδαμο[ς ..]φιαρκα[δ]ιο ...

This inscription is broken on all sides. On the right, the lost portion was slight; but at the top, on the left, and probably also at the bottom, a larger amount appears to be lacking.

The part preserved contains a list of proper names, each with patronymic and *ethnicon*. The first three names are of Cretans from Eleutherna, L[yttos?], and Chersonesos. The patronymic and *ethnicon* of the fourth cannot be certainly made out or restored. The letters still legible at the end of the fourth line lend themselves to the restoration Ἀρκάδιο[ς], and in that case would suggest a citizen of the Cretan city Arcadia. But the *ethnicon* of this city was Ἀρκάς, as we learn from Stephanus Byz., not Ἀρκάδιος. Furthermore, if we adopt Ἀρκάδιος, we shall have for the genitive of the patronymic of the preceding name an impossible form terminating in ...φι. These considerations lead us to distribute the letters in such a way as to begin the *ethnicon* with Διο..., and to end the patronymic with ...κα. In the latter we have a proper name with the ending ...άρκης (Doric, ...άρκας), like Πολυάρκης, Παντάρκης, etc. We might therefore read [φιφι]άρκα, — cf. the Boeotian φιφιάδας, — but the indications of letters on the stone before φι are too obscure to make this reading certain.

Equally uncertain is the reading of the proper name in the first line. The names Μενοίτιος (cf. Polyb. XXIII, 15, etc.) and Τυχαμένους, in the second line, are already recorded among Cretan names. Ἀχαντος, in the third line, occurs here — so far as I know — for the first time. The mark |, which appears on the stone after this name, cannot be a letter, and there is no reason for looking for a sign indicating division at this point. It is either an accidental mark or is a stonecutter's blunder.

The persons here named probably belong to a list of *proxi*

of Gortyna, and this list must therefore be grouped with many others of this class which have come to light in the excavations of the Institute near the Vigles.

2. Slab of common stone, 0.24 m. high, 0.44 m. long, and 0.10 m. thick, found in the same place as No. 1. Now in the garden of Georgios Iliakis at Haghioti Deká.

ΣΤΡΑΤΟΝΙΚΑ
ΕΡΓΥΟΣ

Στρατονίκα
"Εργυος.

The name "Εργυρ. -υος occurs here for the first time.

LYTTOS

The four inscriptions from this city here published are all sepulchral, and, like the greater part of funereal monuments from Lyttos, belong to the Roman epoch. They were discovered in the locality known as τὰ Βήσσαλα, near the vineyard of Georgios Stathakis, priest of Xidhá, upon a little hill northwest of the ancient acropolis. Perhaps here was the cemetery, or one of the cemeteries, of the Roman epoch.

3. Sepulchral slab of common limestone, with raised borders. Height, 0.75 m.; width, 0.47 m.; height of the letters, 0.035 m. to 0.04 m. In the entrance of G. Stathakis's house at Xidhá.

ΝΕΙΚΑΙΑ
ΑΓΑΘΗΜΕ
ΡΟΥΚΑΠΙ
ΤΩΝΟΣ

Νείκαια
'Αγαθημέ-
ρον Καπί-
τωνος.



Below the inscription are cut a wreath (*στέφανος*) and a monogram, the signification of which is obscure to me. The stone terminates above in a small *aëtoma* with a rosette in its centre.

The name *Καπίτων* occurs also on another inscription from Lyttos, which was copied by Mr. J. Alden, and has been published by Dr. Halbherr in this *Journal*, First Series, XI, 1896, p. 556, No. 29.

4. Square slab of common stone in the same house at Xidhâ. The inscription is written in the middle of a circular field which has a diameter of 0.30 m. Height of the letters, 0.03 m. to 0.035 m.

ΕΠΑΦΡΟΥΣ
ΜΑΡΚΩΜΝΗ
ΜΗΣΧΑΡΙΝ

Ἐπαφροῦς
Μάρκω(ι) μνή-
μης χάριν.

The female name *Ἐπαφροῦς* has been also found in an inscription of Praesos published by Dr. Halbherr in the *Museo Italiano*, III, p. 601, No. 31.

5. Slab of limestone, with raised borders, in the same house at Xidhâ. Height, 0.50 m.; width, 0.36 m.; height of letters, 0.025 m. to 0.03 m.

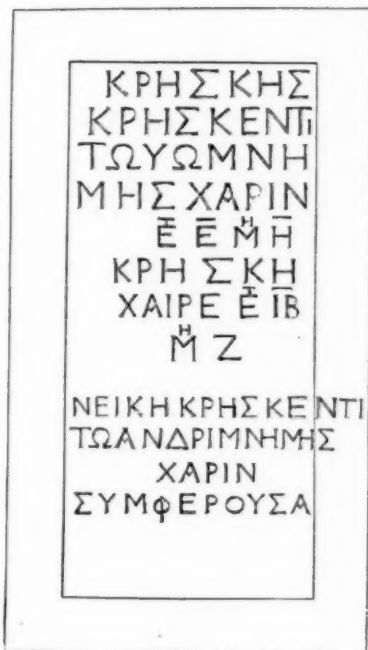
ΕΣΙΔΩΡΑ ΖΩΠΥΡΩ
ΛΥΚΑΣΩΤΑΔΑ

Ἐσιδώρα Ζωπύρω
Λύκα Σωτάδα.

Note the form of the name *Ἐσιδώρα* for *Ἰσιδώρα*, *Εἰσιδώρα*. The name *Ζώπυρος* occurs also in an inscription of the same city published in *Mus. It.* III, p. 673, No. 88. *Σωτάδας* is

common in Crete, and quite peculiar to it, both in Hellenic and in Roman times. We find a Cretan Sotadas in Demosthenes, LIX, 108; another amongst the *Olympionikai* in the δόλιχος, in Pausanias, VI, 18, 6; a Sotades (gen., Σωτάδους) in the rock inscription at Haghios Thomás (Roman times), published in this *Journal*, First Series, XI, p. 574, No. 58.

6. Stelé of common limestone with raised borders, in the same house. Height, 0.84 m.; width, 0.41 m.; thickness, 0.25 m. Height of the letters: lines 1-8, 0.035 m. to 0.04 m.; lines 9-12, 0.020 m. to 0.025 m. Some letters at the end of lines 9-10 are written on the border.



(a) Κρήσκης Κρήσκεντι
τῶ(ι) ὑῶ(ι) μνήμης χάριν
ἐτ(ῶν) ε, μη(νῶν) η̄.

(b) Κρήσκη χαίρε ἐτ(ῶν)
ιβ̄ μη(νῶν) ζ.

(c) Νείκη Κρήσκεντι
τῶ(ι) ἀνδρὶ μνήμης χάριν.

(d) Συμφέρουσα.

This stelé belonged, as may be seen from the many names successively inscribed upon it, to the burial place of a family.

The last person to be buried was perhaps a female servant or slave, born in the house and laid in the family sepulchre; this view receives support from the name *Συμφέρουσα*.

Κρήσκης is the Latin *Crescens*.

ΛΑΤΟ ΠΡΟΣ ΚΑΜΑΡΑΙ

(*Haghios Nicolaos*)

7. Fragment of limestone embedded in a wall of the stable of Georgios Padiaditis and Mrs. Stephanis at Haghios Nicolaos. Height, 0.15 m.; length, 0.28 m. Letters slightly apicated. The inscription is turned upside down.



Ἀγαθ[αί Τύχαι.

Ἐπὶ τῶν Δισχέων κοσμι[όντων τῶν σὺν τῷ δέμν
τῷ Ἀρι]στίωνος ἡ πόλις
..... καὶ τὸ ἄγαλ[μα
ὃ ἐκόσμιον δὲ οἱ]δε.

This inscription belongs to a class of texts often recurring in the cities of the region of Hierapytna and of Lató. Like the inscriptions, Nos. 37, 54, 58, etc., of the *Mus. Ital.* III, and like that published by Dr. Mariani in *Mon. Ant.* VI, pp. 277, 278, etc., this inscription contains a dedication, made by the *cosmi*, of a statue and of something else — perhaps a monument, a temple, or some restored sacred edifice. The fragmentary third and

fourth lines may be restored after this fashion: *ἡ πόλις [τὸν ναὸν . . . ἐπεσκεύασεν] καὶ τὸ ἅγαλ[μα ἀνέθηκεν]*, 'the city has restored the temple of such and such a divinity, and has dedicated his statue.'

The tribe, or *γένος*, of *Αἰσχεῖς*, to which the *cosmi* here named belong, is already known from the inscription copied by Dr. Mariani, cited above—an inscription which also aids us in restoring the fifth line. In our text, as in the other, occurs a repetition of the name of the official body: *ἐπὶ τῶν Αἰσχέων κοσμώντων* and *ἐκόσμιον δὲ οἶδε*.

8. Small slab of common stone embedded in a wall of the same stable. Height, 0.37 m.; width, 0.23 m.

Ε Π Ι Φ /	Επιφά[νης
Φ Ι Λ Ο Ξ Ε Ν	Φιλοξέν[ου
Χ Α Ι Ρ Ε	χαῖρε.

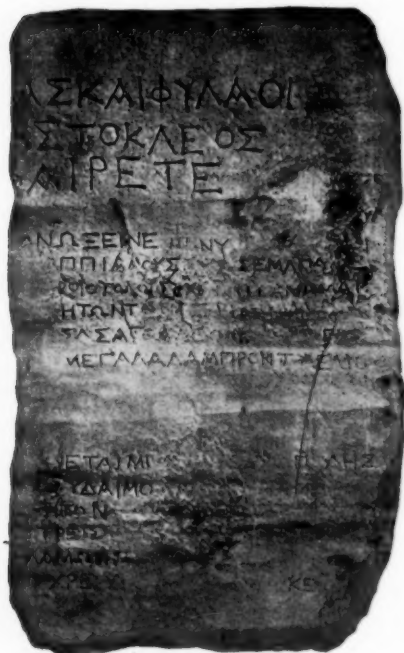
9. Small slab of black stone walled in above the door of the house of Georgios Stephanakis at Haghios Nicolaos.

Φ Υ Λ Α	Φύλα
ΒΟΥΛΙΑ	Βουλία
ΜΕΝΟΚΛΗΣ	Μενοκλῆς
ΒΟΥΛΙΑ	Βουλία.

The name *Φύλα* occurs also in the next inscription.

10. The right portion of a sepulchral stélé, of common stone, found in the walls of the demolished Turkish barracks at Haghios Nicolaos, and brought into the house of Dr. Manousos Syngelakis, the physician of the village. Height, 0.46 m.; width, 0.29 m.; thickness, 0.185 m. The

surface is so damaged that only a little remains legible. The letters of the three first lines are 0.025 m. to 0.02 m. high.



Ἰππί]ας καὶ Φύλα οἱ
Μνα]στοκλέος
χ]αίρετε.

There follow these names two hexastich epigrams, each of which is composed of three elegiac distichs. The former was perhaps in praise or in memory of Hippias, the second of Phyla; or perhaps both inscriptions refer to both dead persons. It would be a vain task to attempt a restoration of these verses, which have almost completely disappeared from the surface of the stone through constant attrition.

I have supplied [Ἰππί]ας as the name of the man in the first line, since it seems to me to occur in the first four letters of the second line of the first epigram.

STEPHANOS A. XANTHOUDIDIS.

ATHENS.

CRETAN EXPEDITION

X

ADDENDA TO THE CRETAN INSCRIPTIONS

IN this article I have collected a few texts and all the fragments that I did not find it convenient to include in my two preceding epigraphical articles 'Inscriptions from Various Cretan Cities,'¹ and 'Epigraphical Researches in Gortyna.'²

Some of the pieces here published are both so defective and so small that of the inscriptions on them very little can be made out. But in epigraphy nothing is to be neglected. A small fragment which seems insignificant to-day may to-morrow acquire its value, when, by reason of fresh excavations, it may be added to other pieces, and thus contribute to the reconstruction of a text. So in the present article a new fragment (No. 24) completes and renders important a Christian inscription (No. 8)

¹ *Am. Journ. Arch.* First Series, XI, 1896, pp. 539 ff.

² *Am. Journ. Arch.* Second Series, I, 1897, pp. 159 ff. I regret that in this article, for reasons for which I am not wholly responsible, several typographical errors escaped correction. Some of these, such as the omission of accents in Greek words, lack of marks of punctuation or of division (-), etc., can be readily detected and need not be specified here for correction. The following, however, should be mentioned:

Page 168, No. 3, line 3, read κορυμνῶτων (for κορυμνῶτων).

Page 179, line 13, read ΑΑΙΚΟΥΣ (for ΑΑΙΚΟΥΕ).

Page 195, line 7, read συνεπιψηφίσαι (for συνεψηφίσθαι).

Page 202, line 5, read Δαμοφά[νης] (for Δαμοφάμ[νης]).

Page 205, line 33, read ἐς τὰ θύματα (for ἐς ἀθύματα).

Page 213, lines 15, 16, read "what does not belong to him" (for "what does belong to him").

Page 228, line 8, read φέσμο[ν] (for φέσμο[ν]).

of the preceding series,¹ and another (No. 4) similarly supplements an isolated portion of a treaty from the Pythion, which was obtained in 1887.

Inscriptions on small objects, on terra-cottas, on articles of domestic use, local or imported, are a class that has hitherto been scantily represented in Crete. The researches of the Institute have made slight additions also to this store. Numbers 26-34 are various marks on terra-cottas, Rhodian vase-handles, sling-bullets, etc.²

With these texts the product of the Cretan Expedition, from the point of view of epigraphy, is nearly exhausted. There remain only a few Latin inscriptions, and some Archaic Greek fragments. The former will be published in a special article; the latter, having been discovered in the course of the excavations at Praesos, Haghios Ilias, and Prinià, will find their natural place in the report to be published in a later number of this *Journal* on these works.

1. **Gortyna.**—Fragment of a block of limestone in the garden of Manoli Iliaki at Haghioi Dekà. Height, 0.225 m.; length, 0.41 m. Letters 0.09 m. to 0.10 m. in height.



..... ς ὀμ[ν]
 τ

2 (*a* and *b*). **Gortyna.**—Two pieces of the usual limestone with lines running *boustrophedon* and letters of the same height (0.07 m. to 0.08 m.) and character. Probably two contiguous fragments of one and the same block. Found amongst the ruins of the ancient city by Manoli Iliaki. Fragment *b*:

¹ *Am. Journ. Arch.* First Series, XI, 1896, p. 610.

² Cf., also, Nos. 62 and 77 in the 'Inscriptions from Various Cretan Cities,' *Am. Journ. Arch.* First Series, XI, 1896, pp. 579, 593.

dimensions, 0.18 m. by 0.22 m.; fragment *a*: dimensions, 0.185 m. by 0.29 m.

b.

a.



.... νται . αγ (?)
 νατον

3. Gortyna. — Fragment of the usual limestone in the house of A. and P. Kouridaki at Haghioi Deká. Height, 0.10 m.; length, 0.34 m.; thickness, 0.30 m. Letters 0.023 m. to 0.025 m. in height.

The *boustrophedon* writing is divided into columns and resembles that of the Great Inscription and of the other texts of the same group.



Right column: perhaps π]α[τ]έ-
 ρ[α
 Left column: κα γε
 ονται.

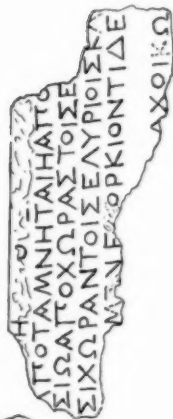
This fragment comes without question from the Lethaeus, while the two preceding belong to the class from the Pythion.

4. Gortyna. — Fragment of limestone in the garden of Manoli Iliaki at Haghioi Deká. Height, 0.12 m.; length, 0.34 m. Height of letters, 0.012 m. to 0.016 m.

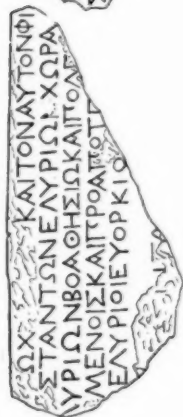
This fragment belongs to a lost inscription from the Pythion, a part of which is also the fragment No. 1 of *Monumenti Antichi*, I, pp. 58, 59, which was found by me in the excavation of that precinct in 1887. With the new fragment I here reproduce the earlier one, giving the two in the position that they originally occupied.

EARLIER FRAGMENT.

(Mon. Ant. I, pp. 58, 59.)



NEW FRAGMENT.



..... καὶ τὸν αὐτὸν φέ[λον κ]ή[χθρ]ο[ν] ἐξώ.....
 εὖ τὰν τῶν Ἐλ[υρί]ων χ[ώρα] [ν] ἂ ποτ' ἀμνηται ἡ ἀπο.....
 Ἐλ[υρί]ων βοαθ[ή]σας καὶ πολ[έ]μ[ου] σ[ω]σάμενος τὸς Ἐ[λ]υρίους
 μέμους καὶ προσαπ[ο]τε..... σι χ[ώρα]ν τοῖς Ἐλ[υρί]ους κ[α].....
 Ἐλ[υρί]οι, εὐορκί[ω]ντι μὲν εὖ ἡ μὲν ἐ[πι]ορκίοντι δὲ [τά
 ἐναντία].

These lines contain the conclusion of a treaty of alliance made by Gortyna with the Cretan city Elyrus. Here recur, with few variations, the stereotyped phrases usual in this now well represented class of Cretan inscriptions.

The detached line, of which traces appear on the lower part of the fragment, was probably the beginning of another treaty.

5. **Gortyna.** — Small fragment from the fields near the Vigles. Letters apicated.



Κέφαλο[ς
Κ]εφάλλ[ω
Φιλ]ωτε[ρεύς (?)

.....
.....

Cephalus was probably a *proxenos* of Gortyna.

6. Gortyna. — Fragment of the usual limestone in the garden of Manoli Iliaki at Haghioti Deki. Height, 0.21 m.; width, 0.015 m.; thickness, 0.095 m.



The last letter of the second line looks more like a Γ or a Π than an Ω .

The lack of vowels, both before Γ (or Π) and before Ξ of the first line, suggests that we here have abbreviations.

The third line is by a different hand, and belongs to a different period.

7. Gortyna. — Fragment of a large disk with raised border, perhaps a *le Kane*, of hard blackish stone, found not far from the Vigles in the very centre of the ancient city. Now in Manoli Iliaki's garden at Haghioti Deki. Height, 0.25 m.; width, 0.25 m.; thickness, 0.07 m. Letters, 0.027 m. to 0.029 m. in height.



The beginning of the second word suggests that we have here the remains of a dedication to the Cretan goddess Britomartis.

A Latin inscription lately discovered, which is soon to be published in the last *Additamenta* of *C.I.L.* III, informs us that at Gortyna there existed a sanctuary of this goddess, worshipped with the epithet Dictynna, which is peculiar to her. It is probable that this circular object, on which our inscription is written, was one of the votive offerings of this temple (*ἀναθήματα*).

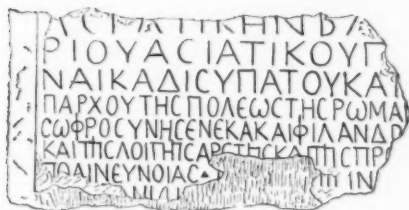
8. Gortyna. — Fragment of slab of gray marble, embedded in the exterior wall of the *καφφενείον* of the Kouridaki brothers at Haghioi Deká. Height, 0.20 m.; width, 0.16 m. Letters, 0.03 m. high, in the first and second line; 0.019 m., in the third and fourth.



..... ωνος
..... * (δηνάρια) ψν

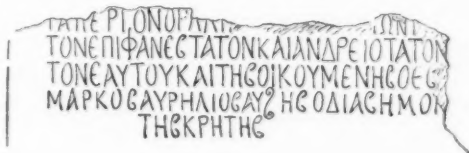
.... Αύ]τοκράτορος ..
.... 'Αντ]ωνε[ίνου(?) ...
.....

9. Gortyna. — The following inscription has already been published in *C.I.G.* no. 2587, from Pococke's copy (*Inscr. Ant.* pt. I, chap. 4, s. 2, p. 43, no. 1). I have been able to find it again in a wall of the field of Nicolis Kyriakaki adjoining the road from Haghioi Deká to Mitropolis, and I reproduce it here in a better and more perfect copy, which preserves the peculiar forms of the letters and their ligatures. Height, 0.80 m.; width, 0.65 m.; thickness, 0.53 m. The letters of the first line are 0.06 m. to 0.07 m. in height and are well spaced; in the third line they are of equal height, but are more erect and less spaced; in the other lines they are more crowded and are shorter (0.05 m. in height).



.....
 Ἄσιατι]κὴν Β[αλε-
 ρίου Ἀσιατικοῦ γ[υ-
 ναῖκα, δις ὑπάτου καὶ [ἐ-
 παρχοῦ τῆς πόλεως τῆς Ῥωμαί[ων,
 σωφροσύνης ἕνεκα καὶ φιλανδρ[ίας
 καὶ τῆς λοιπῆ(η)ς ἀρ[ε]τῆς κ[α]ὶ τῆς πρ[ὸς] τὴν
 πόλιν εὐνοίας·

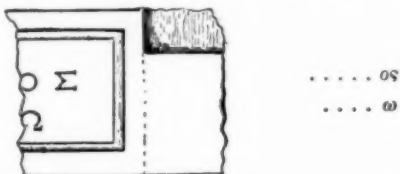
10. **Gortyna.** — From the field of Nicolis Kyriakaki, near the κάτω μῦλος. The inscription is on the upper part of a column of gray marble, which perhaps supported a bust. All the lines are broken off at the right except the last; the first line is almost wholly gone. The letters are long and erect, and the *sigma* has a peculiar form. The inscription is almost illegible because of the corrosion of the surface, which has almost wholly removed it. The height of the column is 1.25 m.; the diameter, 0.43 m. Letters, 0.055 m. to 0.075 m. in height.



.....
 τὸν ἐπιφανέστατον καὶ ἀνδρείοτατον
 τὸν ἑαυτοῦ καὶ τῆς οἰκουμένης [θ?]εσ
 Μᾶρκος Αὐρήλιος Αὐ)ης ὁ διασημ[ό]τατος ...
 τῆς Κρήτης.

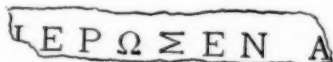
This is an honorary dedication to a Roman whose name has been lost from the first line. The cognomen of the dedicator, with the peculiar abbreviation of the first syllable, is enigmatical to me. I must leave to scholars specially devoted to Roman antiquity further attempts to elucidate this text.

11. **Gortyna.** — Fragment of an architrave, of the usual local stone, in a field belonging to Manoli Savvidaki at Haghiōi Deka. Length, 0.64 m.; height, 0.35 m. Letters, 0.055 m. in height.



Evidently the remains of two proper names, the first in the nominative, the second in the genitive: 'Ο δέινα τοῦ δέινος.

12. **Gortyna.** — Fragment of an architrave or some other architectonic piece, about 1.00 m. in length, and 0.25 m. in height; walled in above the balcony of Manoli Alezizaki's house at Haghiōi Deka.



The inscription contained the dedication of a building—*ὁ δέινα* or *ἡ πόλις* . . . *ἄφ]*ιέρωσεν—probably to some divinity: 'Α[πόλλωνι, 'Α[ρτέμιδι (?).

13. **Gortyna.** — Fragment of a block, of the usual limestone, in a wall of the house of Ilias Iliaki at Haghiōi Deka. Height, 0.10 m.; length, 0.37 m. Letters, 0.035 m. to 0.025 m. in height.



14. **Gortyna.** — Small fragment of limestone in a wall of the ruined house of Ioannis Kalogeriās, in the village of Mitropolis. Height, 0.255 m.; width, 0.215 m. Letters, 0.04 m. in height.



15. **Gortyna.** — Fragment of a slab, of the usual limestone, in the garden of Manoli Iliaki at Haghiol Dekā. Height, 0.275 m.; width, 0.16 m. Letters, 0.035 m. to 0.05 m. in height.



16. **Gortyna.** — Fragment of a marble slab in the same garden. Height, 0.20 m.; width, 0.19 m.; thickness, 0.05 m. Letters, of late Roman times, 0.035 m. high.

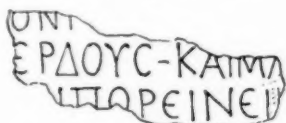


17. **Gortyna.** — Fragment of common stone in the same garden. Height, 0.11 m.; length, 0.23 m.; thickness, 0.15 m. Bad letters, of late Roman date, 0.03 m. to 0.04 m. high.



... κα]ῖ βουλῇ Γορτ[υνίων
..... Μάξιμον ἐν κ.....

18. **Gortyna.** — Fragment of a marble slab, 0.11 m. wide, and 0.07 m. thick. Letters of the same epoch as No. 17, 0.025 m. high. In Iliaki's garden at Haghioi Deka.



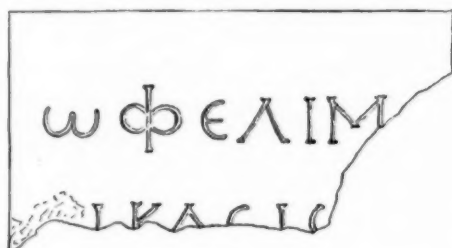
19. **Gortyna.** — Small fragment of a marble slab with very small letters; in the same garden. Height, 0.08 m.; width, 0.05 m.; thickness, 0.02 m. Letters, 0.01 m. to 0.012 m. in height. Late Roman times.



20. **Gortyna.** — Small fragment of a slab of porphyry in the house of Manoli Savuidaki at Haghioi Deka. Height, 0.11 m.; width, 0.07 m.; thickness, 0.025 m. Apicated letters of Roman times.



21. **Gortyna.** — Fragment of a stelé of common limestone in Iliaki's garden. Height, 0.255 m.; width, 0.28 m.; thickness, 0.055 m. Bad letters of late times.

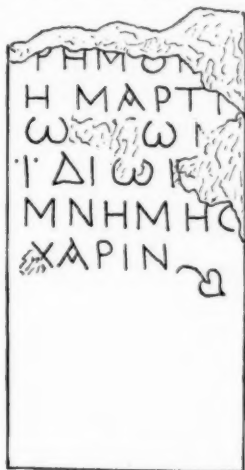


Ὁφέλιμ[η
Ν]ικ[α]σί[ω
.....

22. Near Gortyna. — Small slab of common stone found in the locality called 'ς τὰ Ἑλληνικά, between Bobia and Mires; now in the house of Nicolaos Katzoulaki at Bobia. Letters, of late Roman times, 0.03 m. high.

CWCIBIA	Σωσιβια-
NONMNH	νὸν μνή-
MHC XA	μης χά-
PIN	ριν.

23. Gortyna. — Sepulchral stelé from the western side of the Acropolis. Height, 0.75 m.; width, 0.34 m.; thickness, 0.39 m. Letters, 0.04 m. to 0.05 m. in height.



The upper part of this inscription is lost, and of what remains only the final formula [ἐκ τ]ῶ[ν | ιδίω[ν | μνήμης | χάριν] is clear to me. To judge from the forms of the letters the inscription must belong to late Roman times.

24. Gortyna. — In my article on 'Christian Inscriptions'¹ I published a copy of a fragmentary inscription from Gortyna,

¹ *Am. Journ. Arch.* First Series, XI, 1896, p. 610.

containing the right half of a sepulchral inscription, which at that time seemed to be of slight importance. Dr. Hazzidaki, with the aid of peasants, has succeeded in finding the missing part of the inscription, and has sent me an impression of the whole from which our facsimile has been prepared.

The text now becomes one of the most interesting of the Christian inscriptions of the city, since it adds a new name to the list of bishops of Gortyna, as given by Cornelius, *Creta Sacra*, I, p. lxxvii, and Gams, *Series Episcoporum*, etc., p. 400.



Ἀνεπαύσατο ὁ μα-
καριώ(τατος) Ἐκκλησιόδωρος
ἐπίσκ(οπος), μηνὶ Ἰουλίου
εἰ, ἡδ(ικτιώνος) ιβ, ἡμέρα
Κυριακῇ.

Ἐκκλησιόδωρος was supplied by me in the publication of the former fragment, but the spelling on the stone is far from correct. In the fourth line εἰ should have been written ἡ.

25. Gortyna. — Inscription from the field of M. Savuidaki. The facsimile is from an impression furnished by Dr. Hazzidaki.



Κωνσταντῖνε
Αὐγουστε,
τοῦ βίνκας (viz. tu
vincas!)

This inscription records one of the Latin "acclamations" which were in use in the Byzantine court and church,¹ and of which a collection is made in the work of Constantine Porphyrogenitus *Ἐκθεσις τῆς Βασιλείου Τάξεως* (*De Cerimoniis Aulae Byzantinae*). We have in our inscription a more correct transliteration of the Latin words in use than that in the manuscript of the *Ἐκθεσις* published by Reiske (*Corpus Scriptorum Historiae Byzantinae*, Bonn, 1829), where we read: ὁ δεῖνα καὶ ὁ δεῖνα αὐγουστοι, τούμβικας (book I, ch. 76: Εὐφημία ἅμα πρῶτ' ὑπὸ τοῦ στρατοπέδου ἐκβοωμένη).

I have not attempted to establish to which of the emperors named Constantine this inscription belongs. One may perhaps think of Constantine the Great, and may find some connection between our salutation and the tradition about the famous "*in hoc signo vinces*." But the only evidence on which we can date our text is the writing, and this does not carry us far, as I have already remarked,² in a country where the entire number of Byzantine inscriptions hardly exceeds twenty.

VARIA SUPPLEX

26. Milatus (?).—Inscription scratched upon a vase brought from the village of Milato (the ancient Milatus) into the collection of the late Russian Consul (Mr. Mitzotaki) at Candia.

ΤΟΜΥΛΛΟΗΜΙ | τὸ Μύλλο ἡμί.

Perhaps not of Cretan origin.

27. Cnossus.—Fragment of the lip of a large vase (*pithos*) found at Cnossus, and now in the Museum of the Syllogos at

¹ I am indebted to Professor Krumbacher for several valuable suggestions that have guided me to the interpretation of the inscription. Cf. his *Byzantinische Literaturgeschichte*, 2te Aufl., pp. 254-256.

² *Am. Journ. Arch.* First Series, XI, 1896, pp. 603, 604.

Candia. The facsimile is of about the size of the original. The letters were stamped in the clay before the first firing.



Ἐπὶ Τι(βερίου) Κλ(αυδίου)

Probably one of the emperors or one of the princes of the Claudian *gens*.

28. Handle of a vase (Rhodian) found by me in the ruins of *Sybrita*. The letters are in relief.



Ἐπὶ Δάμῳ.
Πανάμῳ.

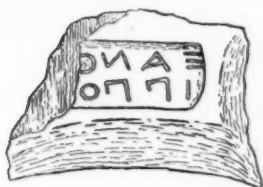
This is a well-known mark. Cf. *I. G. Ins.* I, no. 1120 (British Museum).

29. Another Rhodian vase-handle found at *Knossus*. The letters are in relief.



Ἐξάκεστος.

30. Fragment of a similar handle found at *Xerocambos*, on the eastern coast of Crete (ancient *Ampelus*?).



Ξάνθ | ιππο[ς

or

Ξανθ | ιππο[υ.

31. Mark in relief on a fragment of a vase-handle found in the same place as No. 30. The facsimile is slightly smaller than the original.



Φιλίου.

32. Mark on a fragment of a brick found at *Palaeastron* of *Sitia*, on the eastern coast of Crete, and now in the collection of the *Syllogos* of Candia. The writing is from right to left.



Κνωσίου.

33. *Rhaucus*(?). — Mark upon a terra-cotta water pipe (*fistula aquaria*) found at Haghios Myron (ancient *Rhaucus*?), and now in the house of Zacharis Alatzaki, in the same village. The writing is from right to left.

ΟΤΑΟΤΑΥΟ

Ουάγοντος.

The inscription is complete, both on the right and on the left, but the name is new to me.

34. Leaden sling-bullet (μολυβδός) found at *Xerocambos* (*Ampelus*?).



Aive.

Probably the imperative of the obsolete verb *αἶνω*, an equivalent of *κόπτω* or *τύπτω*, as we may infer from the Hesychian glosses *αἶνων· πτίσσω*; and *πτίσσω· τὸ τύπτω*; *πτίσαι· κόψαι*. Cf. the imperatives *λαβέ* and *δέξαι* on other Hellenic sling-bullets.

FEDERICO HALBHERR.

ROME,
June, 1898.

1897
August — December
1898
January, February

ARCHAEOLOGICAL NEWS¹

NOTES OF RECENT EXCAVATIONS AND DISCOVERIES; OTHER NEWS

GENERAL AND MISCELLANEOUS

THE SOCIETY OF DILETTANTI. — The members of the Society of Dilettanti, now in the one hundred and fifty-sixth year of its existence, determined some time ago to compile and print, from the archives of the Society, a full history of its activity since its foundation. The work was entrusted to Mr. Lionel Cust, under the editorship of Mr. Sidney Colvin, who was secretary of the Society from 1891 to 1896. It will show fully the place which the Society has held both in the promotion and publication of archaeological discoveries, and in the social history of the country, and will be illustrated with photogravures of some fifteen of the Society's historical portraits, including the three famous Sir Joshuas, seven or eight by George Knaption, two by Lawrence, the admirable portrait of J. S. Morritt by Shee, and the well-known "Sir Edward Ryan" of the late Lord Leighton. A limited number of copies will be offered during the present autumn to the general public through Messrs. Macmillan. (*Athen.* September 18, 1897.)

THE EXPORTATION OF ANTIQUITIES FROM ITALY. — The Rome correspondent of the *Times* writes under date November 26: "An important decision regarding the export duties laid on such articles of commerce as fall under the very vague and elastic heading of 'antiquities' has just been rendered by the Court of Appeals in Rome. As is known to all who have attempted to purchase such articles here, the export duty of 20 per cent. levied on them by a law which is an inheritance from the Papal Government is not only a grave charge but one which it is sometimes

¹ The departments of Archaeological News and Discussions and of Bibliography of Current Archaeological Literature are conducted by Professor FOWLER, Editor-in-charge, assisted by Miss MARY H. BUCKINGHAM, Professor JAMES C. EGBERT, JR., Professor ELMER T. MERRILL, Mr. GEORGE N. OLCOTT, Professor JAMES M. PATON, Dr. GEORGE A. REISNER, Professor HERBERT WEIR SMYTH, and the Editors.

No attempt is made to include in the present number of the JOURNAL material published after March 1, 1898.

For an explanation of the abbreviations, see p. 158.

embarrassing to determine, the value of such things being purely fantastic. The law, known as the Pacca edict, applies only to the late Papal territory, each one of the ancient realms of Italy having still its ancient regulation, the duty from Tuscany being 1 per cent., and that from the former Austrian possessions *nil*. The Roman Court has decided that it only applies to such objects as are recognized as 'precious,' i. e. as of exceptional artistic or historical value. The limitation is as vague as the old definition, and perhaps the best results of the decision will be to compel the Government to pass a general and rational law, under which the possessor of an object having value from its antiquity shall be free to carry it out of Italy. Professor Villari, when Minister of Public Instruction, proposed a sensible and comprehensive law which, while imposing a small duty and the necessity of a permission to export, for the purpose of controlling the exportation of the heirlooms of the nation, made it indispensable for the Government either to purchase or permit the exportation. This law, like most of those which the public good has called for, has ever since lain covered by the petty legislation for electoral purposes, which impedes all useful reforms other than those demanded by the constituents of the ministerial deputies. If an object is precious and indispensable to the honor or history of Italy, it is reasonable that its exportation should be prevented, but only by purchase, for it is an outrage that a man may not dispose, according to his interests or necessities, of articles which are his unquestionable property." (*The Architect*, quoted in *American Architect and Building News*, January 8, 1895.)

AUSTRIAN ARCHAEOLOGICAL INSTITUTE.—The Austrian Archaeological Institute has been founded, with headquarters at Vienna. Professor Otto Benndorf has been appointed Director. The Institute began its activity with the year 1898. Its official organ is the *Jahreshefte des Oesterreichischen Archäologischen Institutes in Wien*, the first number of which appears March 31, 1898. This publication supersedes the *Archäologisch-epigraphische Mittheilungen aus Oesterreich-Ungarn*.

ITALIAN NUMISMATIC SOCIETY.—The Italian Society of Numismatists will begin shortly, under the patronage of H.R.H. the Prince of Naples, the publication of the *Corpus Numorum Italicorum*, in which all the coins struck by the ancient and modern mints of Italy will be collected and illustrated. (*Athen*, January 8, 1898.)

GERMAN ORIENTAL SOCIETY.—Prominent representatives of Oriental and Biblical research in Germany, among them Wellhausen, Delitzsch, Kittel, Socin, Hommel, Nöldeke, and others, have united in the publication of an Appeal, the object being the organization of a "Deutsche Orient-Gesellschaft." This society proposes to be national in character, and by the establishment of local unions in the larger cities, and by securing a large number of contributing members throughout the empire, expects not only to awaken a wider and deeper interest in the remnants and remains of ancient civilization in the Tigris-Euphrates valley, in Mesopotamia and

Western Asia in general, as well as in Egypt, but, further, to secure the necessary funds to make excavations and bring monumental relics of these civilizations to the museum in Berlin. Hitherto German scholars have been compelled, as a rule, to depend for their working materials in this department on the expeditions which the governments or private liberality in England, France, and America have sent to the East. Lack of funds and of organization and coöperation has made the Germans mere lookers-on in this eager search and research. The Appeal in question draws attention to the wealth of Oriental antiquities deposited in the museums of London, Paris, and New York, silently contrasting this with the lack of such raw and original material in German collections. A preliminary commission has already been sent East by the "Orient-Komit ," an organization on a smaller scale that has in recent years been supported by a few wealthy Germans. The Appeal declares that it shall be the purpose of the new society (1) to study Oriental antiquities in general, and Biblical archaeology in particular; (2) to secure monuments of Oriental antiquity especially for the Berlin museum, and possibly for collections that may be founded in other parts of the empire; (3) to popularize the results and investigations in Oriental research and arouse a general interest in these investigations. The Prussian Cultus Ministry has warmly approved of this project, and Prince Heinrich von Sch naich-Carolath has accepted the Presidency of the Gesellschaft. (*Nation*, March 17, 1898. Cf. *Berl. Phil. W.* February 19, 1898; *Athen.* February 19, 1898.)

CONGRESS OF ORIENTALISTS.—Rome has been designated as the place for holding the twelfth international congress of orientalists, to be held in 1899. A report of the organization of the Italian executive committee is contained in *J. Asiat.* neuvi me s rie, X, pp. 244-246.

THE ROYAL ARCHAEOLOGICAL INSTITUTE AT DORCHESTER.—The 1897 meetings of the Archaeological Institute were held early in August at Dorchester. General P. M. Rivers gave an address concerning certain square camps which he had excavated. The Society visited the Roman amphitheatre, the area of which is about 210 feet by 150 feet. The site of the Roman Walls of the ancient Durnovaria was traversed and examined. The churches of St. George and St. Peter, as well as the Museum, were visited. Professor Boyd Dawkins gave an address upon the present stage of prehistoric archaeology, in which he contended that the bridge over the gap between paleolithic and neolithic man is to be sought in Southern Asia rather than in Europe. The Society made several other excursions to neighboring points of archaeological interest. Addresses were made by Dr. Cox on the "Treatment of English Cathedral Churches during the Victorian Age," and the Reverend Sir Talbot Baker on the "House of the Vestals in the Forum at Rome and the Discovery of Anglo-Saxon Coins in the Excavation thereof," the Reverend A. Du Boulay Hill on the "Recent Discovery of a Saxon Church at Bremore Church, Some Four Miles from Salisbury." (*Athen.* August 7, 14, 1897.)

NECROLOGY.—**Von Sallet.**—"We ought to have recorded earlier the decease of Professor von Sallet, the Keeper of the Coins at the Berlin Museum, and editor of the *Zeitschrift für Numismatik*, who died on November 25, in his fifty-sixth year." (*Athen*, December 25, 1897.)

R. Adamy.—Dr. Rudolf Adamy, the Inspector of Darmstadt Museum and Professor of the History of Art, has just died at the early age of not quite forty-eight years. Dr. Adamy was the author of a number of publications on art; but his principal work is *Die Architektonik auf historischer und ästhetischer Grundlage*, published in two volumes. (*Athen*, January 22, 1898.)

J. Burckhardt.—The well-known author of *Cultur der Renaissance in Italien* and of the *Cicerone*, died at Basel, August 8, 1897. A sympathetic notice of his work is given by H. Wölfflin in *Rep. f. K.* 1897, pp. 341-346.

A. Postolakas.—The distinguished Greek numismatist, Achilleus Postolakas, died at Athens at the beginning of this month. He pursued his studies mostly in Germany, and having been in constant communication with the German Archaeological Institute, he bequeathed to it his valuable library. Postolakas was for many years Director of the Numismatic Museum of Athens, and when the great theft of coins took place there ten years ago he had the mortification of being arrested, and was only set at liberty when the actual thief was caught at Paris. Postolakas was, however, so deeply hurt that he resigned his post. At the funeral the Vice-Director of the Numismatic Museum delivered an oration, and Professor Dörpfeld made a speech in honor of the deceased in German. (*Athen*, August 28, 1897.)

EGYPT

RECENT DISCOVERIES.—The last year has been a most remarkable one in the history of Egyptian archaeology. The objects of the "New Race" (Petrie) class found by Petrie and Quibell at Ballus and Negadah have been brought into connection with those found at Abydos by Amélineau by means of the results of De Morgan's excavations at Negadah. Thereby the "New Race" is proven to be not only Libyan, but Egyptian. This whole group of discoveries has been shown by Sethe and Borchardt to belong to the first three Egyptian dynasties. One tomb at Negadah has been shown by Borchardt to belong to Menes. Thus, we have in the last year recovered sufficient archaeological material to establish the characteristics of the art of the oldest known period of Egyptian history. (Letter from G. A. REISSER, February 17, 1898.)

ABYDOS.—**The Tomb of Osiris.**—M. E. Amélineau, the French Egyptologist, who announced recently the discovery of the tomb of Osiris at Abydos, in Egypt, has sent to the *Journal Égyptien* the following account of his find:

"Everybody who has had a little education, or has read a little, knows, or at least has heard of, the legend of Osiris. The benevolent god, benign-

nant and charming, to whom is generally attributed the progress of civilization in the Nile Valley, who taught his contemporaries how to cultivate the earth, to enjoy the rural pleasures, to charm their leisures and to forget their fatigues with the help of simple and touching songs, has been considered up to the present time more as a creation of the imagination than as a real, mortal being. The part which in the succession of centuries the religious traditions of humanity made him play some ten thousand years ago, was not calculated to increase the belief in his reality. But hereafter it will be difficult to doubt that Osiris, Isis, his sister-wife, and Horus, their son, lived in reality, and played at least partially the parts with which legends and traditions have credited them.

"The Egyptian texts speak very often of Osiris's tomb, which is designated under the name of 'staircase of the great god.' They add that the high officials that lived a short time after that epoch desired greatly to be buried near Osiris, who had preceded them in life and in death. I discovered on the first of January of this year this famous staircase, and the next day I struck a monument which cannot leave any doubt as to the destination of the tomb which my excavations brought to light.

"Two years ago I had already begun a very important work, if we consider only the number of cubic metres of sand removed, and my diggings on one side had stopped at a point 3 or 4 m. from a large tomb. During my previous excavations, I had found a great number of traces of Osiris worship, but they could be explained by the general devotion that people of Abydos as well as other parts of Egypt had for the god of the dead, who was also called sometimes 'the Universal Lord,' because men are all submitted to death's law. During the whole of last year my time was devoted to works which I did not expect would last so long, and it was only this year that I was able to resume what was left uncompleted.

"The hill under which was hidden Osiris's tomb is about 180 m. in length by 160 m. in width, and is here and there 7 or 8 m. high. It was composed of millions upon millions of small jars and earthen vases, also some large ones mixed up with sand and few rare pieces of stone. From the first days of the excavations, in December last, pieces of pottery of all shapes, entire or broken, were found, bearing inscriptions written in hieroglyphic or hieratic signs. Large numbers of pieces mentioned the name of Osiris and were due to the priests, while a smaller number of pieces bore the name of Amon-Ra. A few of these inscriptions mentioned the house of Osiris. Among Egyptians a term generally used to designate tombs was 'eternal houses.' These discoveries impressed me so strongly that as far back as December 2 I recorded in the diary which I keep of my excavations, the belief that I was going to come across Osiris's tomb. If my discoveries had only related to a general worship, I would not have found the double (Ka) name of King Menes among the debris; I would not have found that the worship of the dead buried under the hill had lasted until the end of the Egyptian empire. In spite of all these proofs, I lacked yet the details given in the Egyptian texts.

"The tomb was in shape a large rectangle, and on the four sides of it were series of tombs which would number about two hundred. Moreover, the necropolis, known in the country under the name of Om-el-Gaab-el-Gharby, contained the sepulchres of persons of very high rank, among them kings, the stelés of which I discovered two years ago. So this first point was settled. On January 1 appeared this fortunate staircase mentioned by the texts. The next day I discovered a unique monument. It was a granite monolith in the shape of a bed decorated with the head and legs of a lion. On this bed was lying a mummy bearing what is known as the white crown, holding in his hands, which came out of the case, a flagellum and a pastoral cane. Near the head were two hawks, and two more were at the feet. The dead was designated by the inscription: 'Osiris the Good Being.' The hawks were labelled: 'Horus, avenger of his father,' and the goddess Isis is also designated by her name.

"This monument is 1.70 m. in length and about 1 m. in width and height. The tomb itself has the shape of a dwelling, with a courtyard in front. It contained fourteen rooms and the staircase, five rooms to the north, five to the south, and four to the east. The western face was open. The two extremities, south and north, were closed by a wall on the east side. The tomb was about 13 m. in length, 12 m. in width, and 2.50 m. in depth. There were evidences of fire in it. I found at the bottom of the rooms indisputable proof of the work of spoliators. This fact of the tomb having been destroyed by fire has rendered sterile a great part of my labor. This is to be lamented, and the case is hopeless; for what is lost is lost forever.

"It is not without a deep emotion on my part that this holy sepulchre of Egypt was brought to light by my workmen, who did not even suspect the importance of the discovery. The emotion I felt at the thought that I was touching soil sacred for thousands of generations was rendered more intense when I considered that my discovery came just in time to prove that what have been called my theories, my theses, were not pure, unsupported theories and sensational theses, but unquestionably realities proved by facts. Such are in a nutshell the main points of my discoveries."

The *Journal Égyptien*, in printing M. Amélineau's letter, makes these comments:

"We give the facts such as they are stated by M. Amélineau. We must remember that Mariette spent much time and money at Abydos in his researches for the tomb of Osiris. The discovery of M. Amélineau, astonishing as it may appear, is a possibility, and in accordance with the records of all the ancient authors and the belief of most Egyptologists, unless this tomb is proved, after more complete investigation of the epigraphic documents exhumed, to be a sanctuary erected at a later date to Osiris. If it is the tomb of Osiris, it must be still more archaic than the tomb of Negadah discovered last year by Mr. J. de Morgan, and also much older in style than all the tombs explored so far by M. Amélineau himself at Abydos. On these points more details are needed." (*New York Sun*, March 6, 1898.)

AMÉLINEAU'S EXCAVATIONS.—M. Amélineau has been allowed to continue his excavations. The rich materials which he found last year are for the most part on sale in Paris. No record was made of the position of the objects. No plans were made on the spot of the buildings excavated. The objects have not been numbered or catalogued. M. Maspero in the *Revue Critique* has just expressed the sharpest condemnation of M. Amélineau's excavations. But in spite of all that, M. Amélineau continues to destroy monuments which are of the utmost importance for Egyptian history. According to a report of the *Journal Égyptien* of Cairo (supposed to be written by Amélineau himself), Amélineau has this year discovered the tomb of Osiris,—a building with a staircase, a sarcophagus with a granite figure of Osiris lying on top of it, and a large number of inscriptions. A number of objects of the Old Empire, supposed to come from Amélineau's excavations, have lately been sold by Arab dealers in Cairo. A head of a king's statue of the Old Empire, the only one known to exist, has been bought for the McGregor collection (England). (REISNER.)

DENDERAH.—**Excavations.**—Mr. Petrie, under the auspices of the Egypt Exploration Fund, has been excavating at Denderah, and has found a number of tombs of the sixth and eleventh dynasties. (REISNER.)

KOM-EL-AHMAR, NEAR KOPTOS.—**Excavations.**—Mr. Quibell has been excavating. (REISNER.)

SUEZ.—**Excavations to be Undertaken.**—Mr. Goleniscief has received permission to excavate in this neighborhood, and probably expects to find Persian or cuneiform inscriptions. (REISNER.)

TANIS.—**Americans to Excavate.**—The American Exploration Society of Philadelphia has received permission to excavate, but the work has been delayed owing to differences in regard to objects to be removed to America. (REISNER.)

SAQQARAH.—**Tombs of the Sixth Dynasty.**—The Services des Antiquités has excavated two tombs of the sixth dynasty. (REISNER.)

BERSHEH.—**Antiquities of the Middle Empire.**—The Arab dealer Farrag has been conducting excavations in partnership with the Services des Antiquités; and a large number of wooden sarcophagi, canopic chests, and other objects of the Middle Empire have been found. (REISNER.)

Tomb of Amenophis II.—In addition to the tomb of Thothmes III, the *Reforme* (Cairo newspaper, March, 1898) has announced the discovery, by M. Loret, of the tomb of Amenophis II, together with the mummy and the sarcophagus of that king. (REISNER.)

CAIRO.—**The New Museum.**—M. Loret, the Director appointed to succeed M. de Morgan, assumed charge of the Museum in October, 1897. The New Museum building was begun April 1, 1897, and will probably require three years to build. It is situated in the city, near the Kasr-en-Nil

bridge. The international committee appointed to catalogue the Museum collections began work on November 1, 1897. (REISNER.)

The Museum.—Prospective Investigations.—We read in recent issues of the *Egyptian Gazette* (January 22-25) that the building of the new museum at Kasr el-Nil has been suspended for three months, in view of some question about the remuneration of the engineer in charge; that Mr. John Ross of Alexandria has asked for the government's license to excavate a site in the desert about two days' journey to the southwest of Cairo, he bearing all the expenses, and dividing with the government any treasure that may be found; and that Sir Benjamin Baker is on his way to Upper Egypt to ascertain if the waterfall at the cataracts is available for industrial purposes. (*Nation*, February 24, 1898.)

ANTINOE.—Excavations.—Gayet has been continuing his excavations in behalf of the Musée Guimet. (REISNER.)

MUSÉE GUIMET.—Le Musée Guimet has received a collection of Roman-Egyptian antiquities, excavated at Antinoe by Gayet at the expense of M. Guimet, and a collection of objects found in Cappadocia by Ernest Chantre. (*R. Hist. d. Rel.* XXXVI, 296.)

DESHÂSHEH.—Excavations by W. M. Flinders Petrie.—In the *Archaeological Report of the Egypt Exploration Fund for 1896-97*, pp. 21-22, W. M. F. Petrie describes his excavations at Deshâsheh, a short distance south of Ahnâs. Here he opened about one hundred and fifty tombs of the fifth dynasty. The principal results were the statues of the prince Nenkhftka and his son Nenkhftek, found in the *serdab* of his tomb. Many coffins of the same age were obtained. The tools left behind by the grave-diggers of the fifth dynasty were also recovered, and many other lesser objects of interest were found. "The most important conclusion, historically, is that nearly half of the people at that time were in the habit of cutting the bodies of the dead more or less to pieces; in some cases sundering every bone from its fellow, and wrapping each in cloth before rearranging them. No such practice was suspected before among the Egyptians, and it points to a cannibal ancestry. The details were discussed in the *Contemporary Review* for June." A large part of the work at Deshâsheh was in copying the tombs of Anta and Shedu, two princes of the nome. Altogether 150 feet length of drawings, 5 feet high, was done. The subjects are interesting, one being a fine battle and siege scene.

OXYRHYNCHUS.—Papyri.—The *Archaeological Report of the Egypt Exploration Fund for 1896-97*, pp. 1-12, contains an account by B. P. Grenfell of Oxyrhynchus and its papyri. The buildings of the town are almost completely destroyed, and few antiquities of any value were found even in tombs, for most of the tombs had been plundered. The papyri were found in rubbish heaps. Those papyri which were buried under more than a few feet of earth were ruined by moisture. Some hundreds of thousands of fragments are dismissed as practically useless. Of the rest, the greater part

are Greek. Some three hundred of these are literary, and belong for the most part to the first three centuries after Christ. About half of these are Homeric, a few are Byzantine. The various non-literary fragments number some two thousand, belonging to the first seven centuries after Christ. About thirty Latin papyri were found, including a fragment of the first book of Virgil's *Aeneid*. Almost no Hieratic and Demotic papyri, and few Coptic papyri were found. A fragment of the fourth book of Thucydides is published by A. S. Hunt, pp. 13-20.

HERMOPOLIS MAGNA. — *Ptolemaic Inscription.* — Jouguet adds to the documents collected by Strack, *Die Dynastie der Ptolemäer*, a dedicatory inscription from Hermopolis, which has been wrongly restored in *B.C.H.* XX, pp. 177-191. The names should be Ptolemy XIII, Philometor, and Cleopatra Tryphaena. Some readings in Strack, No. 142, are also corrected. (*B.C.H.* XXI, pp. 166-168).

SYOUT. — *The Artist Ammonius.* — The marble statue mentioned in *B.C.H.* XX, 249, has arrived at Gizeh. It has no artistic value, but contains a new artist's signature of the time of Severus. It is carved on the right knee, and reads: Ἀμμώνιος | Ἀπολλοφάνου | ἐποίησεν. (*B.C.H.* XXI, pp. 166-168).

BABYLONIA

NEW VERSION OF THE BABYLONIAN ACCOUNT OF THE DELUGE. — In *The Independent*, January 20, 1898, Father V. Scheil publishes the cuneiform text and English translation of the fragment of a new version of the story of the Deluge, found by him in Sippara. This text is a copy, dated in the time of King Ammizaduga, about 2140 B.C. The original of the Sippara version of the story may be much older. The tablet is discussed and the new version compared with other versions by Morris Jastrow, Jr., in *The Independent*, February 10 and 17, 1898.

MESOPOTAMIA

HATRA. — *Ruins of the City.* — The ruins of Hatra, south of Mosul, are described by Ch. Jacquere, *R. Arch.* XXXI, 1897, pp. 343-352 (7 cuts). There were two walls about the city. The outer one is now visible only as a slight rise of the ground, but a large part of the inner wall, with twenty-one towers, still exists. Within the city the most important building is the palace, considerable remains of which exist. The plan shows three large halls side by side, with some smaller rooms between them and a fourth hall behind. This last is surrounded by two walls. The halls were covered by barrel vaults, now in ruins. No domes or cupolas are seen in the city. The arches are built of carefully cut *voussoirs*, and the palace walls faced with carefully laid, well cut stones. The ornamentation of cornices and the like shows strong Greek influence. A peculiar kind of adornment consists of human masks or busts in relief on the *voussoirs* of arches or the squared stones of walls. Some of the acanthus leaves of entablatures are very rich.

PERSIA

FRENCH MONOPOLY OF EXCAVATIONS.— . . . By an agreement with the Shah of Persia, and in return for a considerable sum of money paid by the French Government, France now obtains the monopoly of archaeological explorations in Persia; and M. J. de Morgan, late director of excavations in Egypt, has been appointed to superintend the excavations in Persia. It will be remembered that M. Dieulafoy and his wife made very important discoveries at Susa, where he unearthed a palace of the date of Darius, in which were found decorations in the form of colored tiles and other objects of interest. We presume, however, that M. de Morgan, who has taken so much interest in the study of the very earliest period of Egyptian history, will not content himself with the study of a period so relatively late as that of the Achaemenian dynasty, but will hope to find remains of the earliest civilized inhabitants. It will be remembered that many believe that the Sumelian element in early Babylonian history came from the region of Susa; and Elamite dynasties again and again ruled over Babylonia long before its conquest by Cyrus. (*The Independent*, September 16, 1897.)

PALESTINE

PALESTINE EXPLORATION FUND.— *Quarterly Statement.*— The quarterly *Statement* of the Palestine Exploration Fund for July announces that the explorations at Jerusalem have ceased on account of the termination of the firman permitting them, but that application has been made to the Porte for leave to undertake excavations elsewhere. It has been a source of regret that no specimens of Hebrew writing have been discovered in the course of the work. Just at the close, however, a carnelian seal was found with a name inscribed in characters of the sixth century B.C., according to Professor Sayce, or "about 450 B.C., or from the time of Ezra," according to Colonel Conder. A preliminary account, by M. Clermont-Ganneau, of the extraordinary fifth-century mosaic map of Christian Palestine, Egypt, and possibly Asia Minor, recently discovered at Madeba, a Moabite city to the east, endeavors to identify some of the geographical names displayed. A plan of Jerusalem in this map may throw light on the disputed questions connected with its topography. Other articles are on the water of Jacob's Well, the Damascus railways, and the length of the Jewish cubit, by Colonel Watson. By a comparison of a large number of fresh Syrian barleycorns with some taken from an Egyptian grave of the third century of our era, he concludes that it was very nearly 17.79 inches long. The barleycorn, it may be added, his researches lead him to believe, is the best natural object which could have been selected as a unit of measure. (*Nation*, August 12, 1897.)

JERUSALEM.— *Explorations.*— The last published *Statement* of the Palestine Exploration Fund is devoted principally to the report by Dr. Bliss

of his diggings in Jerusalem. An attempt to find the tomb of David and the kings of Judah was a failure, perhaps because it was begun too late, just before the expiration of the firman giving authority to dig, and perhaps because the search was made under a mistaken notion as to where it was to be looked for. M. Clermont-Ganneau writes a letter to *The Athenaeum* arguing that the digging was done in the wrong place, and that the tomb is a deep pit with chambers which can probably be found within the curve made by the tunnel of Siloam, which was bent at an angle not easily explainable, except on the theory that it was necessary to avoid the tomb of the kings. The most interesting discovery which Dr. Bliss reports is that of an Israelite seal of a time before the Captivity, containing two names of owners — one Ishmael, and the other probably Pedaiah — in the old Israelite writing. The seals of this character are quite rare.

The Guardian thus summarizes the excavations of Dr. Bliss :

“ Though no discoveries of general popular interest have been made, such as the discovery of the tomb of David, or remains of royal buildings on Ophel, yet to the archaeologist and the student the excavations have been in no wise barren or unfruitful. Beginning on April 26, 1894, at the south-western corner of the hill commonly known as Mt. Zion, just outside the wall of the English cemetery, Dr. Bliss came at once upon a tower which formed part of an ancient wall. This was quickly succeeded by the discovery of the ruins of a gateway, where three periods of reconstruction appear to be represented. A paved street, with a well-constructed drain under it, was traced some distance in the direction of the pile of buildings known as the Coenaculum. From this gateway the wall, strengthened at intervals by towers, was followed eastward along the edge of the hill overlooking the Valley of Hinnom, till the Jewish cemetery was reached. This, of course, was an insuperable obstacle to further continuous progress. Passing, however, to the southeast side of the cemetery, and digging at a point in line with the excavated wall, Dr. Bliss was fortunate in finding the ancient wall reappear; and he traced it down into the Tyropoeon Valley to a point about 500 feet due south of the Pool of Siloam, where the remains of another ancient gateway, flanked by a large corner tower, were found. From this tower the wall was followed in a northeasterly direction toward the ridge of Ophel, exhibiting now characteristics of two historical periods; and another wall, at a distance of 150 feet from the tower, branched off toward the north, up the Tyropoeon Valley, leaving the Pool of Siloam to the east. These walls, with their special characteristics, led Dr. Bliss tentatively to the following conclusions. The earliest wall, crossing the Tyropoeon and ascending the slope of Ophel, including the Pool of Siloam within its circuit, he assigned to the reign of Hezekiah; the second, which follows much the same line, to the zeal of the Empress Endocia (A.D. 450); and the third, which ascends the Tyropoeon Valley and excludes the Pool, to the Herodian period.

“ Dr. Bliss, at this stage in his work, returned to the so-called Zion, and proceeded to excavate along a line running north and south, and so almost

at right angles with the wall previously discovered there. This line was intended to cut any inner walls which might have inclosed the upper part of the hill, and from the first it proved a line of surprises. He began by digging down on the north side of the wall he had previously excavated. Breaking through the bed of rubble and *débris* on which that wall rested, he came upon the massive foundations of an earlier wall. Further excavation led to the discovery of six walled chambers, projecting from its southern face, and the base of a large tower immediately to the west of them. From this point Dr. Bliss tunnelled northward, and soon reached, as he expected, the rock-cut aqueduct which at one time conveyed water from Solomon's Pools, near Bethlehem, into the Temple area. Immediately beyond the aqueduct a great square tower was found with walls 14 feet in thickness. These walls inclosed a room 25 feet square, built over a rock-cut chamber, which had, however, been entirely filled up with rubble set in mortar. This tower is still a mystery. Its north side had been connected with buildings, in one of which a beautiful mosaic floor 25 by 19 feet was found in almost perfect preservation. Further to the north, the foundations of a tower were reached at the angle of a city wall, which was traced westward nearly to the Coenaculum and northward for seventy yards, when it turned at right angles toward the Tyropoeon Valley. Returning to Siloam, Dr. Bliss resumed the excavation on the line of the wall which he had already followed some distance toward the pool, from the tower and gateway at the southern end of the Ophel ridge. As mentioned above, the wall runs up the Tyropoeon Valley to the Pool of Siloam, which it leaves on its eastern side. Just before reaching a point opposite the south end of the present pool, the foot of a great stairway of thirty-four steps was discovered, 22 to 27 feet in width, leading up the valley past the pool, and revealing in its construction two historical periods, the earliest most probably that referred to in Neh. 3:16. The discovery of a Byzantine church (460 A.D.), built immediately to the north of the pool, and including it within its cloisters, followed, the ground plan of which exhibits points of great interest. A paved street with drain under has been traced from the Pool northward, toward the southeast angle of the Temple area, for over 600 feet." (*The Independent*, October 28, 1897.)

APHECA. — Roman Military Diploma. — The second tablet of the Roman military diploma referred to in this JOURNAL, 1897, p. 399, has been obtained and sent to the Louvre. The two tablets were discovered at Fick, ancient Apeca, near the Lake of Tiberias, and were separated by the finder in hope of double pay. The second tablet has the same dimensions as the first. The inner face contains the following inscription:

AD X K DEC IVSTINO ET BASSO COS COH · II · VLP ·
GALATAR CVI PRAEST Q · FL · Q · F · PAL AMATIANVS ·
CAPVA EX PEDITE GAIO LVCII · F · NICIA

The outer face has the names of seven witnesses. Two of the names are not complete. Héron de Villefosse supplies what is lacking as follows:

[<i>ti. c</i>] LAVDI(<i>i</i>)	[<i>menandri</i>]
P. ATTI(<i>i</i>)	[<i>severi</i>]
L. PVLL(<i>i i</i>)	DAPHNI
P. ATTI(<i>i</i>)	FESTI
T. FLAVI(<i>i</i>)	LAVRI
TI. IVLI(<i>i</i>)	FELICIS
C. IVLI(<i>i</i>)	SILVANI

The diploma dates in the year 139, and several of the names of witnesses have appeared on a number of contemporary diplomas. (*C. R. Acad. Insc.* November-December, 1897, p. 681.)

PHOENICIA AND SYRIA

TYRE. — An Inscription. — At the meeting of the Academy of Inscriptions, July 2, 1897, Clermont-Ganneau exhibited a fragment of marble found by the seashore near Tyre. It bears an inscription in Phoenician letters: "of Abbaal, chief of a hundred." This is the second known inscription from Tyre. (*C. R. Acad. Insc.* 1897, pp. 347-348.)

BOSRA. — Nabataean Inscription. — At the meeting of the Academy of Inscriptions, July 23, 1897, de Vogüé communicated the squeeze of a Nabataean inscription taken at Bosra by Father Séjourné. The text reads: This entire wall, the . . . and the basins (?) were constructed by Thaïmon, son of . . . in honor of Dontara and T . . . gods. This relates to a sacred enclosure such as are not uncommon in Syria. At the same time, de Vogüé spoke of Nabataean inscriptions in a valley southeast of Petra, which he had not been able to decipher entirely from imperfect copies made by Dr. Elmi. (*C. R. Acad. Insc.* 1897, pp. 373-374.)

NICOPOLIS. — Inscriptions. — In *B.C.H.* XXI, pp. 164-166, are published some notes relating to recent discoveries in Syria. From Nicopolis two new but very short inscriptions are added to the two already known. MM. Perdrizet and Fossey of the French School have made an extensive trip in Northern Syria, and brought back many photographs of monuments and copies of inscriptions, besides making careful studies of the sanctuary of Zeus Boetocaecus and the mausoleum of Hermal.

HAURAN. — Coin of Commodus. — Father Lagrange has presented to the Cabinet des Médailles a coin of the Emperor Commodus, with mention of Dousares, god of the Adraeans. The coin was found by Father Séjourné in Hauran. (*C. R. Acad. Insc.* 1897, p. 492.)

ARABIA

PETRA.—**Inscriptions and Sanctuaries.**—In returning from Petra Father Lagrange and Father Vincent were attacked by Bedouins. Two of their men were killed and all their baggage lost, including photographs and squeezes. They saved copies of inscriptions and drawings which they had about their persons. They found the sanctuaries mentioned by Ehni in 1862, outside of the city of Petra. The principal inscription is in a sanctuary called *El-mer*, above the niche which contained the statue of the god. It states that the statue is that of the god Obodath and that it was set up by the family of *beni Haneinou* for the welfare of king Haretat Philodemus, of the queen, of the king's sons and grandsons, whose names are given, in the year of Haretat 29, *i. e.* A.D. 20. The god is the deified king Obodat. In a second grotto, called *El-madras*, is a similar inscription, but much mutilated, in honor of a god Dusara. (*C. R. Acad. Insc.* 1897, pp. 672 f.; 699 f.)

CYPRUS

MYCENAEAN GOLD PLAQUE.—In the *R. Arch.* XXXI, 1897, pp. 333-335 (cut), J. Naue publishes a fragment of a gold plaque of Mycenaean style, the first yet known from Cyprus. At the left are two warriors and a fragment of a third, marching to the left. They wear helmets and carry round shields and, perhaps, lances. Separated from them by a band of very simple ornament is a sphinx, also walking toward the left. Behind the sphinx is a fragment of a pillar. Above and below are bands of spirals. The style is that of the later Mycenaean period, and the plaque may date from the end of the eleventh or the beginning of the tenth century B.C.

ASIA MINOR

DORYLAEUM.—**Inscriptions.**—In the *Athen. Mitth.* XXII, 1897, pp. 480-482, an interesting document from Dorylaeum (Eski-Schehir) is published. Hadrian is here called Ζεὺς Πατριῶς, and the senate is deified. A *fluminea divarum* (σεβαστοφάντης) appears here for the first time on Greek soil. A γυνασίάρχος τῶν γυναικῶν is found, l. 14. Several shorter documents are published, pp. 482-486. One, from Dorylaeum, is a Latin mortuary inscription, at least as late as the time of M. Aurelius. From the valley of the Caÿster are five inscriptions from gravestones, one of which seems to be an elegiac couplet. From Nasli in the valley of the Maeander are two. In Tralles M. Pappaconstantinos has recovered the right half of the inscription Le Bas, *Asie mineure* 612. Both stones are in the Jewish cemetery. It is in honor of M. Aurelius Onesimus. From Laodicea on the Lycus comes one very fragmentary inscription, which furnishes no complete sentence.

PHRYGIA. — **Inscriptions.** — During explorations in 1897, the sites of Cidramus, Caroura, Trapezopolis (Bolo), Bria, Anavo-Sanaos, and Meros, were ascertained, and the rivers Caprus and Cadmus, wrongly given on the maps, were identified. The inscriptions copied, largely of imperial times, show that the constitutions of the Greco-Phrygian cities were on the usual Greek model. *ἐπιμελητής* is used for *λογιστής*, an imperial financial officer. A tribe *Attalia* at Laodicea shows that the Pergamene kings introduced bodies of settlers into Seleucid cities after 190 B.C. A decree was found regulating the relation of the metropolitan police, *παραφύλακες*, to the subject villages of Hierapolis. A long and important inscription of the third century after Christ, concerning the imperial estate on the Tembris, shows the extent of the domain and the status of the coloni, who were practically bound to the soil. (J. G. C. ANDERSON, *J.H.S.* October, 1897, pp. 396-424.)

MYSIA. — **Inscriptions.** — Seventy-four inscriptions, dating from republican to Christian times, are largely epitaphs but include also honorary and votive dedications and marking-stones. A few are metrical. Officials of the *μῦσται* called *βασιλεῖς* are mentioned; also a public health-officer, *ἀρχίατρος*. Some light is thrown on the identification of Miletropolis and on the possible existence of an Adriania distinct from Hadriani, and of a regular provincial assembly in pre-Augustan times. The prevalence of the door-type of stele in a limited region is perhaps due to a distinction of race as well as of religious ideas. The god Men, son of Paean (*ὁ Παῖανος*), is found associated with Hecate, as one form of the divine pair common in these regions, here conceived as mother and son and later, apparently, transformed into Livia and Tiberius. The Hecate may be compared with an Artemis worshipped in connection with a healing hot spring, not far away. A Zeus Pandemos, perhaps = Zeus Abrettenos, occurs. Curious "misprints" and misspellings are shown, and corrections are made in some inscriptions previously published. (J. A. R. MUNRO, *J.H.S.* October, 1897, pp. 268-293.)

MYTILENE. — **A Cameo from Pergamon.** — In *Berl. Phil.* W. February 9, 1898, P. N. Papageorgiou describes a cameo in the possession of Chr. Gortziotis in Mytilene. The cameo is said to have been found near Pergamon. The left half is broken off. On the right half the front and side of a temple appears. It has two corner columns which bear the pediment. Two persons lean against the columns. Before the temple is a tree, under which are one seated and one standing person. A fifth person hurries to the left. A sixth person stands by the side of the temple. Above the temple (*i. e.* in the background on a hill), seven persons in three groups; above these a bird and an animal of some sort. All the persons are males. On the back of the stone is part of a circle. On the base of the relief are the letters:

ΤΙCΖΗΝΟ
ΙΚΗΤΟΥ

probably ἑλ[λ]πὶς Ζηρὸ[ς] Ἀν[α]κίτρον. Most of the figures are much injured, but the letters are well preserved.

An Inscription.—April 23, 1897, as an old house near the church of St. Theodora was being torn down, a marble seat was found with the inscription:

(Ἀρχ)ιρέως διὰ βίῳ Θεᾶς Ῥώμας | καὶ τῷ σεβαστῷ Διὸς Καίσαρος | Ὀλυμπίῳ πατρὸς τᾶς πατρίδος | προεδρία Γαίῳ Κλαυδίῳ Ποτάμωνος | Διαφάνη τῷ ἐργεῖται. (P. N. PAPAGEORGIOU in *Berl. Phil. W.* September 18, 1897.)

GREECE

VARIOUS DISCOVERIES.—In *Athen. Mitth.* XXII, pp. 228-230, are brief notes of discoveries, chiefly from Greek newspapers.

In Athens has been found a base of *poros* bearing a fragmentary boustrophedon inscription [Δάμο]νος παιδὸς [σέμα] τόδε Αὐτο[κ]λέος.

In Sparta have been found two well-preserved mosaics, one representing Orpheus amid the beasts, the other only ornamental decoration. They were discovered near the Europa-mosaic. On the bronze Poseidon from Creusis, see this *JOURNAL*, 1897, p. 351.

The remains of an ancient temple have been discovered near Mt. Oeta while preparing earthworks. The report says it is like the temple of Nike, but calls it Doric. On discoveries at Thermopylae, see below.

Three inscriptions, two from Mylasa and one from near Smyrna, are published. Inscriptions from Thespieae, Chalcedon, Dorylaeum, Laodicea, and several other places are given among the "Funde," pp. 351-360. They are for the most part of little interest.

ATHENS.—**Recent Excavations (1897).**—In *Athen. Mitth.* XXII, 225-228, W. Dörpfeld reports on recent excavations at Athens. The excavations of the German Institute, along the Agora, came to a temporary close with the complete discovery of the ancient building on the east slope of Colonus Agoraeus, just below the Theseum. Its plan is very similar to a temple, but it is probably the *στοὰ βασιλῆως*, and thus fixes an important point in Athenian topography. A full publication is promised. The excavations at the Enneacrurnus are temporarily suspended, without complete examination of the various branch conduits.

The excavations of the Greek Archaeological Society on the north slope of the Acropolis have been carried further to the east. After the complete clearing of the grottoes of Apollo and Pan, whereby a foot-path to the Acropolis came to light, a new cleft in the rock was discovered just below the mediaeval staircase close to the north wall. Access to this cleft can only have been by a ladder, as there is not room for a flight of steps. The lower end of the shaft was closed in the Middle Ages by a wall, and all ancient remains in this neighborhood have disappeared. Deep excavation below the cave of Apollo has brought to light the foundations of an ancient

building in which were found a multitude of inscriptions which had evidently fallen from above, as they contain chiefly dedications to Apollo. Among these is one very valuable inscription from the middle of the fifth century which seems to refer to the building of the temple of Athena Nike, and fixes the date as earlier than the building of the Propylaea.

The same society has continued its work near Callirrhoe, on the Ilissus, and about one hundred paces from the spring, on the rock south of the river, has discovered the foundations of the Ionic temple described by Stuart and Revett, though so badly destroyed that they could scarcely be recognized without their plan. This is held by Dörpfeld to be the temple of Artemis Agrotera (Paus. I, 19, 7).

Excavations in the Winter of 1897-98.— During the winter of 1897-98 the following excavations have been carried on at Athens. The German Institute continued the investigation of the great aqueduct of Pisistratus, and it can now be easily examined from the theatre of Herodes to the Pnyx. A number of small branches were found, apparently to feed neighboring wells. Whether they were all permitted by the state may be doubted, as in later times it must have been an easy matter to tap the aqueduct. Many receptacles have been found which are older than the aqueduct, and must belong to the time when the Enneacrunus was still Callirrhoe. One of the largest of these canals seems to have led to the Acropolis, and is still being excavated. The sanctuary of Demeter Thesmophorus, above the Enneacrunus on the Pnyx, and the Eleusinium have not yet been found, though their general position seems fixed from the previous discoveries. In the places where they must have stood, the ancient buildings have been so completely destroyed that even the foundations cannot be traced.

The excavations on the north slope of the Areopagus have been more successful. As the two buildings already discovered belonged to the west side of the Agora, an endeavor was made to fix the south side by excavation near the chapel of St. Elias, where the *poros* foundations of an old Greek building were discovered, probably connected with the Metroon or Bouleuterion. Later walls in its vicinity yielded some inscriptions. Further to the south, and higher on the Areopagus, a Roman building with *hypocaustae* was discovered; and near by six Dipylon graves, containing vases and also iron swords, a knife, and a bronze spearhead. These must belong to a time when the Areopagus was still outside the city wall.

The Institute has also begun excavations on the north slope of Colonus Agoraeus, in order to find the road from the Agora to the Dipylon and the course of the Eridanus. When this work is completed, further excavations are to be made about the Theseum in the hope of getting further material for determining the name of this temple.

The Greek Archaeological Society has conducted excavations at the Olympieum, with a view to uncovering the foundations of the temple, and already the steps have been found in some places. It has also begun the complete uncovering of the Stoa of Attalus, of which only a part has been

cleared, and even that left in neglect. The excavations on the north slope of the Acropolis have been resumed. The wall below the cave of Apollo is probably a fragment of the lowest fortification of the Acropolis, the north boundary of the Pelargicum. It runs along the slope of the Acropolis toward the east past the Clepsydra, and then turns at a right angle and is carried to the rock directly below the westernmost grotto of Apollo. This is the "Pythion" of Thucydides and Philostratus, and lies outside the fortifications; while the Clepsydra is within the Pelargicum, though its water is carried out through a small channel. (W. DÖRPFELD, in *Athen. Mith.* XII, pp. 476-480.)

Dörpfeld's Excavations.—Dörpfeld has been continuing his excavations in Athens in the quarter called Velassaro (apparently near the so-called Theseum). He believes that the old market was in this region, the foundations of a circular building having been found, also a very old aqueduct and some graves which are shown by inscriptions to belong to the sixth century B.C. (*Berl. Phil. W.*, January 8, 1898.)

At the January meeting of the German Archaeological Institute at Athens, Dörpfeld spoke of the results of his excavations in the winter of 1897. He has found the place where the ancient water supply passes from the southwest slope of the Acropolis near the theatre of Herodes. The tunnel has been cleared so that one can now go through it easily. The water flowed in large clay pipes which lay on the ground of the tunnel. A large number of these has been found. Two secondary aqueducts pass from the main tunnel; one through the depression between the Pnyx and the Museum hill to the Deme Koilé, the other to the foot of the Museum hill. A still earlier system of water supply was found leading from the Acropolis to the spring which Dörpfeld calls Callirrhoe. This was, however, completely neglected, and a part used for other purposes after Pisistratus changed Callirrhoe into Enneacrunus. To the north of the Areopagus Dörpfeld has fixed the site of the old market. Excavations at the north of the so-called Theseum may result in finding the great street from the Dipylon to the market and the bed of the Eridanus. (*Berl. Phil. W.*, February 26, 1898.)

Papers Read before the German Institute.—The following papers have been read before the German Archaeological Institute in Athens: January 6, 1897, W. Dörpfeld, *Athens in the Time of Cecrops* (Thuc. II, 15); E. Ziebarth, *On C.I.G. 1840* (cf. *Athen. Mith.* XXII, p. 218); W. Reichel, *Prehellenic Cults*; January 20, 1897, R. Zahn, *Archers in Archaic Art*; J. Svoronos, *Notes on Attic Numismatics II, The Admission Tokens for the Dionysiac Theatre*. February 3, 1897, P. Kavvadias, *Excavations on the North Slope of the Acropolis, the Grottoes of Apollo and Pan*; E. Ziebarth, *Unpublished Greek Inscriptions from the Journal of Cyriacus*; St. Dragoumis, *An Inscription containing an Epigram of Simonides* (*Athen. Mith.* XXII, p. 52); W. Dörpfeld, *Excavations at the Areopagus*; R. Zahn, *An Ostrakon of Themistocles*; February 17, 1897, P. Wolters, *King Nabis* (*Athen. Mith.* XXII, p. 139); W. Dörpfeld, *The Paintings of Panaenus at Olympia*. This paper

combated the recent reconstructions of E. A. Gardner and N. G. Politis, who conceive the pictures as placed on a balustrade between the feet of the throne, and not on the stone balustrade between the inside columns of the temple. This latter view agrees well with the words of Pausanias, and the objection that the pictures must be nearly square, and that as the breadth between the columns is about 2 m., the balustrade must have been about 2 m. high, is not well founded, for the single picture need not have occupied the whole breadth of the panel, but may well have been enclosed between painted columns, so that the height of the balustrade need not have exceeded 1-1.50 m. A further objection to the new view is that it separates the Hesperides from the picture of Heracles, though the two obviously belong together, as is the case in the arrangement preferred by Dörpfeld. [Cf. *Ausgrab. v. Olympia*, Textband II, 13.] March 3, 1897, W. Dörpfeld, *The Excavations East of the "Theseum"*; W. Reichel, *The Origin of the Greek Temple*; W. Dörpfeld, *The Theatre on Delos* (B.C.H. XX, p. 256); March 17, 1897, P. Wolters, *Τὰ στοὰ βασιλική on Thera*; A. Wilhelm, *Notes on Attic Inscriptions*; March 31, 1897, R. Zahn, *The Vase-painter Andocides*; W. Dörpfeld, *The Theatre at Pergamum*; December 8, 1897, P. Kavvadias, *The Date of the Temple of Athena Nike* (Εφ. Ἀρχ. 1897, p. 173); W. Dörpfeld, *The Greek Theatre of Vitruvius* (Athen. Mitth. XXII, p. 439); December 22, 1897, H. von Prott, *Theocritus*, Id. 17, and *Contemporary History*; F. Stähelin, *Ptolemaeus of Telmessus*; J. Svoronos, *The Popular Assembly of Cleisthenes and the Theatre of Lycurgus*, I. (Athen. Mitth. XXII, pp. 231-232, 486.)

Ancient Street.—At a meeting of the German Institute in Athens, February 2, 1898, Dörpfeld spoke of the so-called dromos discovered near the Theseum. It was the one broad street of Athens leading from the Dipylon and the old Agora, originally of no great size. It was widened when the Eridanus was arched over. The portion of the dromos now discovered is 15 m. wide. (Athen. March 5, 1898.)

Archaic Tombs.—At Athens a fresh group of archaic tombs, with a number of vases of the earlier Dipylon style, has been excavated in the neighborhood of the Areopagus. (Athen. February 5, 1898.)

PIRAEUS.—The Tomb of Themistocles.—At a meeting of the Parnassus Society of Athens, December 27, 1897, J. Dragatsis discussed the position of the grave of Themistocles and concluded that it was at the bend of the coast to the right after one comes out from the harbor of Piraeus, at the point called Karo Krakari, where Dragatsis found a large structure covered with flat stones, which is surrounded by an altar-like semicircle. Here he found a few pieces of horn and some remains of human bones. (S. P. Lambros, in *Athen.* January 29, 1898. Cf. *Berl. Phil. W.* March 12, 1898.)

SALAMIS.—Epigram of Simonides.—In *Athen. Mitth.* XXI, pp. 52-58, pl. ix, S. N. Dragoumes gives an account of the discovery of a fragment of an epigram of Simonides. The stone was first seen by him in April, 1895, when it formed part of a doorstep in the village of Ampelakion, near the ancient city of Salamis. Although he copied then the line which remains,

it was not till January, 1897, that he discovered its identity with a part of the epigram composed by Simonides for the tomb of the Corinthians who fell at Salamis (Bergk, 96). The stone was then brought to the National Museum. It is a block of Pentelic (?) marble, 0.79 m. long, 0.455 m. high, and 0.07 m. thick. It contains *ον πακ' ἐναίομες ἄστυ Κορίνθου*, and in the next line, *(ν)τος*, i.e.

[ὦ ξέγε, εὐνδρ]όν πακ' ἐναίομες ἄστυ Κορίνθου
[νῦν δ' ἄμμ' Αἴα]ντος [νάσος ἔχει Σαλαμῖς.]

The inscription shows the Corinthian alphabet in ξ , and also contains M for ξ . The form ν is new for ρ in a Corinthian inscription [?]. It is natural that the Corinthians should use their own alphabet for this inscription and that the poet should introduce Doric forms into the Ionic elegy, though these forms have not been preserved in the literary sources. Many funeral monuments have been found near the spot whence this stone was taken, showing that the land given the Corinthians by the Athenians was in the cemetery of the town, but thus far the search for the remainder of this epitaph has been unsuccessful.

ELEUSIS. — Inscriptions. — In the 'Εφ. 'Αρχ. 1897, pp. 33-66, A. N. Skias publishes fifty inscriptions from Eleusis. Most of these are very fragmentary. Several are dedications consisting of a name and the word *ἀνέθηκεν*; most of the others are honorary degrees. The dates range from the fourth century B.C. to the late Roman times. No. 49 is composed of the fragments 'Εφ. 'Αρχ. 1885, p. 108, No. 21. and B.C.H. VI (1882), p. 436, which are now seen to belong together.

MEGARA. — Topography. — Dörpfeld and A. Wilhelm have investigated the topography of Megara and fixed the position of its two citadels, and have examined the water-works and the town at the port of Nisaea. On one of the hills fragments of Mycenaean and Trojan vases were found. (*Berl. Phil. W.* March 12, 1898; *Athen.* March 5, 1898.)

THEBES. — Mycenaean Remains. — At a meeting of the Philological and Archaeological Section of the Parnassus Society of Athens, December 27, 1897, D. Philios described some prehistoric graves at Thebes. Their general plan, on the whole, corresponds to that of domical graves elsewhere. These graves are poor, having yielded few interesting finds. The chief value of this discovery is that it proves the existence of Mycenaean civilization at Thebes. (S. P. LAMBROS, *Athen.* January 29, 1898; cf. *Berl. Phil. W.* March 12, 1898.)

MEGALOPOLIS. — Inscription. — Recently an inscription was found in Megalopolis concerning Diaeus, the Megalopolitan general who is mentioned at length, but with disapprobation, by Polybius and Pausanias. He was general of the Achaeans repeatedly during the period of the capture of Corinth, and summoned the Achaeans to the hopeless struggle against Mummianus. He was censured because, after the defeat, he fled from Corinth

to Megalopolis, where, after killing his wife to prevent her being made prisoner, he committed suicide by drinking poison. (*The Nation*, September 22, 1897.)

LACONIA. — Inscription. — An inscription in honor of C. Julius Eurycles Herculanus (cf. Paton, *Transac. Amer. Philol. Assoc.* XXVI) is published by P. Perdrizet, *B.C.H.* 1887, pp. 209-210.

DELPHI. — Engraved Shell. — In the *Inst. de Corr. Hell.* on January 29, 1896, P. Perdrizet presented some photographs and drawings of a curious object found at Delphi on July 28, 1893, near the treasury of the Athenians. It is a fragment of a shell (*tridacna*), decorated on the outside with engraved designs, in a style which is in no way Hellenic. A bearded personage wearing a tiara faces the left, and raises his hand in a gesture of prayer. The top of the shell is carved into a rude representation of a human head. The shell when perfect must have been served as a patera. Naturalists say that the shell belongs in the Indian Ocean from the Red Sea to the Philippines. Other shells of this sort have been found in Chaldaea, Assyria, (three fine specimens come from Nineveh), Egypt, Camirus, and Vulci. Most of these are in the British Museum. Perdrizet attributed all the specimens to Assyrian workmen of the seventh and sixth centuries B.C. Like the ostrich eggs of Vulci, these shells were probably carried over the Mediterranean by Phoenician traders. The one from Delphi was probably an *ex-voto*. The influence of these shells on Greek art seems to be practically nothing. (*B.C.H.* XX, pp. 604-605; 3 pls. The plates show the shells from Delphi and Nineveh.)

THERMON. — Remains of the City. — The Greek Archaeological Society has been excavating at Thermon in Aetolia. The site has been determined by inscriptions, one of which contains a compact with King Philip with the provision that the record shall be set up in Thermon and in Delphi. The wall enclosing the sacred precinct at Thermon is 2.60 m. thick, built of large stones. Within the enclosure was a great hall for the meetings of the delegates of the Aetolian League. Its front is 130 m. long. There were found thirty monuments with inscriptions, and the most important discoveries were made in that neighborhood. Among the bases for statues one mentions Heraclides as artist. A monument of Ptolemy was found almost uninjured, with several inscriptions. Between the bases were found fallen tiles, pieces of clay, charred stones, and human bones. After the destruction by Philip V the place must have remained untouched until the present time. Among the lesser finds are many objects of bronze, parts of statues, the beautiful head of a small figure, a head of Medusa, parts of an ornamented sword, bronze utensils, and the foot of a bronze horse. (*Berl. Phil. W.* December 11, 1897.)

THERMOPYLAE. — Discoveries. — Defensive works erected by the Greek army at Thermopylae have led to reports of archaeological discoveries. The director and two members of the French school visited the

place in 1897. At *Chalcomata* the discovery of a Doric temple like that of Athena Nike at Athens had been announced. In reality the sappers uncovered the foundations of a watch-tower of limestone, evidently built to cover the entrance of one of the paths by which the pass could be turned.

The works in Thermopylae led to the discovery of an ancient cemetery, where many tombs have been opened. They contained some glass and earthenware, the latter unpainted and of forms very unlike the best period. There were also found some Roman imperial coins.

At Hypata several inscriptions came to light, all but one of which had been already published. In eight cases the rediscovery furnished means of correcting previous copies. These nine inscriptions are given, and also four from Delphi, which relate to Hypata, and throw light upon the relation of the inhabitants of this city to the Delphic oracle in the time of the Empire. (*B.C.H.* XXI, pp. 151-159.)

THESSALY.—*Inscriptions.*—In *B.C.H.* XXI, pp. 159-160, Giannopoulos communicates two new inscriptions from Kaitza in Thessaly. One is a decree of proxeny for a certain Cleostratus; the other, part of a list of emancipations. Unfortunately the name of the city which occupied the site is not given, and it is otherwise unknown.

SALONICHI.—*Inscriptions.*—In *Athen. Mitth.* 1897, pp. 223-224, L. Büchener publishes two inscriptions from Salonichi. One is of a freed-woman, Murria Urbana; the other is a decree in honor of Aelius Heliodorus.

THRACE.—*Sanctuary and Sculpture at Orochak.*—In *B.C.H.* XXI, 119-140, V. Dobrusky gives an account of the discoveries in December, 1895, at Orochak, near the village of Saladinovo on the Hebrus, where a sanctuary of the nymphs has been found. The temple seems to have been a rude building, without any architectural decorations; but a number of small objects have been found, which have been placed in the Museum of Sofia. There are included ninety-five *ex-voto* reliefs in marble, representing the three nymphs; forty-eight lamps of terra-cotta, three of which show a winged genius holding a torch, running toward the left, while a fourth is a mask of Silenus; thirteen round mirrors, all having on the back the inscription $\eta \chi \alpha \rho \iota \varsigma \epsilon \lambda \mu \iota$, written from right to left; four glass vials for perfumes; three bone spoons; fifteen bronze coins of the empire, and two of Macedon; and a small *ex-voto* of rude workmanship, representing a horseman. To the worship of the nymphs in Thrace belong two other reliefs at Sofia.—one from Novo-Selo (Fig. 18), showing the three nymphs and Jupiter; the other, found in 1895 at Pizos (Fig. 4), showing the nymphs followed by the Thracian horseman. The nymphs also appear on the imperial coins of some Thracian cities. The greater part of the article is taken up with a description of the reliefs, of which ninety-three are described, and a fragment illustrated (Fig. 19) without description. These show, for the most part, the three nymphs, either naked in the attitude of the Graces, or dancing (1-12), or fully draped, and standing side by side, the differences being chiefly in the details of the costume or position (13-91). Number 92

shows a priest *en face*, at his right an altar, and at his left the three nymphs, holding each other by the hand (Fig. 16). Number 93 shows Jupiter and Juno standing on either side of an altar, and to the left of Juno the three nymphs, in the same attitude as on 92, but much smaller than the gods. Many of these reliefs bear the name of the dedicator.

SAMOS.—**The Heraeum to be excavated.**—The *Berl. Phil. W.* January 8, 1898, states, on the authority of Aristomenes Sterjioglidis, director of the gymnasium in Vathy, Samos, that permission will probably be given to Dr. Sarre to excavate the site of the Heraeum of Samos. The importance of the excavation of this building can hardly be overrated.

PAROS, ANTIPAROS, and DESPOTIKO.—**Excavations.**—S. P. Lambros writes to the *Athenaeum*, January 1, 1898, about the excavations by Tsountas in Paros, Antiparos, and Despotiko, a small island immediately southwest of Antiparos. Tsountas has on the three islands excavated about one hundred and eighty graves of prehistoric date. The discoveries made there consist of vases of terra-cotta and marble, marble statues, necklaces of stone, pearls, and chips of obsidian. The excavations give much information concerning early burial customs, and some remains of houses of prehistoric date have also been discovered.

ITALY

POMPEII.—**Excavations.**—Excavations were continued during July, 1897, along the north side of Reg. VI, Ins. XV; but as only the superficial earth was removed, no discoveries of especial interest were made. The excavations of August brought to light a number of inscribed *amphorae* and one new brick-stamp, *BDALVIA*. The results of the excavations during September and October were not especially noteworthy. By November the excavation of the house, with the entrance at No. 13, on the eastern *vicolo* of Reg. VI, Ins. XV, was completed, and a plan of the block published (cf. *Not. Scavi*, 1897, pp. 460 ff. with pp. 269 ff.). An interesting *sacrum*, found in No. 18, is pictured on p. 464, and two *graffiti* portraits [of Nero?], on p. 462. The work in December was directed toward the clearing of the street to the north of the *insula* and of that to the east, which had already been partly excavated. The uncovering of the adjoining part of the city wall with its tower was also begun. (*Not. Scavi*, 1897, *passim*.)

Painted Oscan Inscription.—An Oscan inscription has recently been discovered differing somewhat from its congeners thus far known (cf. Conway, *Italic Dialects*, Nos. 60-63). It reads

eksuk. amciannud | eituns. amat. tribud | tuv. amat mener.

(*Not. Scavi*, 1897, p. 465.)

BOSCOREALE.—**Another Roman Villa.**—A villa situated not far from that of Pisanella, where the rich find of silver vessels was made, is

described and illustrated by A. Sogliano. The arrangement of rooms is not essentially different from that of the villa of Pisanella (cf. the monograph by A. Pasqui), but this villa had, unfortunately, been despoiled in ancient times of all but useless furnishing. Seven human skeletons were discovered in the course of the excavations. Some of the wall paintings are worthy of note, especially some depicting landscapes, and one in the wine-press, representing Bacchus and Silenus, the former letting wine pour from his *cantharus* into the open mouth of his accompanying leopard. (*Not. Scavi*, 1897, pp. 391-402.)

POZZUOLI. — Magic Images. — In a tomb, resting upon fragments of burned bone, have been discovered eight little statuettes of clay of the rudest execution, each inscribed with the name, in Greek, of a man or a woman, and in all cases but one with the name repeated on both front and back. Professor Hülsen recognizes in them effigies of people devoted by magic rites to the infernal deities. Such effigies were, to be sure, usually of wax; but Dr. Vaglieri calls attention to the passage in Virgil, *Ecl.* 8, 50, 51, where clay is also mentioned. (*Not. Scavi*, 1897, pp. 529-534; 8 cuts.)

BRINDISI. — Inscriptions. — A number of new inscriptions of a sepulchral character have been found at Brindisi, of which the following are the most important. They are inscribed on slabs of white limestone:

(3) Height, 0.77 m.; length, 0.61 m.

D · M
TI · CLAUDIVS
HELLESPONTIANVS
V · A · LX · H · S
IVLIA · VXOR · CONIVGI
OPTIMO

(2) Height, 0.64 m.; length, 0.40.

D ♡ M
ERYCIA ♡ CI
OECVMENE
V · A · I · M · XI
QVOT DECVIT NATAM MATRI PATRIQVE
PARARE HVNC TITVLVM MISERAE
FECIT VTERQVE PARENS
H ♡ S

(*Not. Scavi*, July, 1897, p. 326.)

ROME. — Inscriptions. — The following inscriptions have been found on the Via Salaria:

(1) A slab of travertine, measuring 0.65 x 0.64 x 0.06 m., contains the following sepulchral inscription:

Q · CALPVRNIVS · ZABDA
 Q · CALPVRNIVS · DIOMEDES
 Q · CALPVRNIVS · DAPNVS
 T · MANNIVS · EPITYNCANVS
 M · BAEBIVS · SAMP SARO

- (2) A fragment from a columbarium. Size, 0.11 × 0.10 m.

P · CLOD*i* u s
 T HALL*u* s

- (3) On a piece of marble. Size, 0.25 × 0.06 m.

OSSA · TI · ACVTI · > · L
 GNATONIS

- (4) On a marble slab, 0.23 × 0.16 m.

D · M · LESBIAE · CAES
 VIX · A · XXV · FECIT
 PARIS · CONIVQ
 SVAE · B · M · ET · POS
 TERISQ · SVIS

- (5) On a large slab of travertine, 0.37 × 0.25 m.

RVSTIA · L · L · HILARA
 FECET · SE · VIVA · MO
 NVM · SIBI

(*Not. Scavi*, July, 1897, p. 308.)

Recovery of a Lost Inscription.—In the restoration of a wall in the courtyard of the Palazzo de Rossi-Ferraoli in the Piazza d'Araceli, the following fragmentary inscription was discovered on a small base of marble. At the end of the fifteenth century it existed entire in the garden of the Mattei in Trastevere, where it was copied by several collectors. It afterwards disappeared, though it was published in the *Corpus* (VI, 2269) from the early copies, which can now be corrected from the original.

TI · IVLLO(*sic*) BALBILLO | S · SOL · ELAGABALI | EVDEMON ·
 LIB | PATRONO · *optimo*

The name Elagabali has been chiselled out, but is still legible. Four other inscriptions relating to this same Ti. Iulius Balbillus are *C.I.L.* VI, 708, 2129, 2130, 2270. (*Not. Scavi*, 1897, p. 418.)

Graffito said to represent the Crucifixion.—In February, 1898, it was announced in many newspapers of Italy and other countries that a *graffito* representing the crucifixion had been discovered in one of the buildings

near the foot of the Palatine. The *graffito* was said to date from the first century after Christ. Soon doubts were expressed, and it appears that the *graffito* is much later than the first century. Moreover, the inscriptions appear to be merely proper names, where they are legible at all, and the scene represented is probably rather a gymnastic performance of some sort than a crucifixion.

CAMPAGNANO.—Early Graves.—In the district of Selvaggrossa, a small group of tombs, apparently forming the burial-place of a country family, has recently been discovered. They date from a period preceding the great commerce with Greece, as the only pottery found in them was pre-Corinthian and *bucchero*. (*Not. Scavi*, 1897, pp. 305–307.)

BITONTO.—Early Interment.—A *tomba a ziro* recently excavated appears to be the earliest yet discovered in the great necropolis of this place. Among the funeral furnishings were a fairly well preserved Corinthian helmet, remains of a second, a spear point, and some vases of Apulian workmanship. (*Not. Scavi*, 1897, pp. 433–436; 4 cuts.)

PALESTRINA.—Fragments of a Calendar.—In various places in Palestrina there have been discovered: a fragment of the calendar of Verrius Flaccus containing the single word *PROVENIEBANT*, another of the same calendar containing references to two festivals on the same day, — to that of *Spes* in the Forum Holitorium and to another previously unknown, termed *VICTORIAE · VICTORIAE VIRGINI · IN PALATIO*, — and finally a small fragment of the consular *fasti* of Praeneste giving only the beginning of the names of the *consules suffecti* of the same year in the reign of Tiberius, apparently A.D. 18. (*Not. Scavi*, 1897, pp. 421–424.)

TORRE ANNUNZIATA.—Mosaic.—An important mosaic was brought to light on the 14th of July, 1897, in the course of excavations on a private estate in the district of Civita. Within a rich framework of fruits and flowers, varied by masks, is depicted a gathering, apparently of philosophers, in the neighborhood of a temple or portico. Professor Sogliano suggests that Raphael's 'School of Athens' may have been inspired by a work of classical art, of which this mosaic gives a reproduction. (*Not. Scavi*, 1897, pp. 337–340; 1 cut.)

COTRONE.—Sculptures from the Temple of Juno Lacinia.—F. von Duhn presents a study of a considerable number of fragments, chiefly of sculpture from the area of the temple of Juno Lacinia. A fragment, apparently of a votive inscription, is also noteworthy as one of the few archaic inscriptions thus far found in Magna Graecia. It apparently dates from the sixth century B.C. (*Not. Scavi*, 1897, pp. 343–360.)

MONTE CAVE.—A Statue of a Roman Matron.—A statue of Luna marble, headless, and fully draped, after the style of the so-called *Pudicitia*, was recently found on the slope of Monte Cave, and is published, with a cut, by L. Mariani. (*Not. Scavi*, 1897, pp. 389, 390.)

SAVIGNANO SUL PANARO.—**Mosaics.**—Two polychrome mosaic pavements, of elaborate geometric design and good workmanship, in *opus tessellatum*, are described and illustrated by E. Brizio. (*Not. Scavi*, 1897, pp. 382-385.)

FONTANALBA.—**Rock-drawings.**—At a meeting of the Society of Antiquaries, January 27, 1898, C. Bicknell communicated some further examples of rock-drawings from Val Fontanalba, Italy, showing that a representation of a man ploughing with a yoke of oxen was in many cases intended. (*Athen.* February 5, 1898.)

MONTECHIARO.—**Bronze Candelabrum.**—Pieces of a bronze candelabrum belonging to an Etruscan tomb. The candelabrum is surmounted by a figurine in bronze, 0.10 m. high, representing the beardless Dionysus with a crown of flowers and a short mantle, holding in his right hand a cylix, and extending his left hand with open palm. (E. BRIZIO, *Not. Scavi*, p. 5.)

SPOLETO.—**Discoveries of Antiquities.**—The discovery of pavements, painted plaster, the corner of a large Roman room, fragments of statues, and a coin of Maximian have helped to confirm the belief that the present Piazza del Mercato occupies the place of the old Forum. At the south of the Forum a lead pipe was found. On one side is the inscription:

C · TITIVS · SVCCESVS · FEC

On the reverse side is the numeral sign X. In the Piazza Bernardino Campello a basin has been removed which was evidently an ancient sarcophagus. The inscription, published inaccurately, *C.I.L.* XI, n. 4854, reads:

L BAEBIO SABINO
CONIVG CARISSIMO
BAEBIA MVSTIA

The excavations in connection with sewers and water service have brought to light remnants of masonry and pipes which prove that the old aqueducts of Spoleto were of Roman date. (G. SORDINI, *Not. Scavi*, 1898, pp. 6-19.)

TERRANOVA FAUSANIA.—**Discoveries in a Roman Necropolis.**—At a depth of about 50 cm., fourteen tombs were found in rows. They contained the usual objects of bronze and pottery, also some coins which could not be identified.

In one tomb was found an Aretine vase, with the stamp

AVILI.

In all the graves, except one in which a funeral urn was found, the heads were toward the west; and the skulls were dolicocephalous, with the exception of one the shape of which could no longer be determined. (P. TAMPONI, *Not. Scavi*, 1898, pp. 38-40.)

BRESCIA. — Excavations. — In October, 1897, excavations under the demolished church of S. Cassiano proved that the church had stood on the site of a temple. Among other objects were found (fig. 1) a male statue, wanting head, right arm, and feet. An oar is held by the left hand against the left shoulder. It is the statue of a river god, and differs from the usual recumbent figures of river gods. It is suggested that it is the statue of the river Mella. (2) A clay lamp, broken on the upper surface, on which is a rough representation of a divinity wrapped in a garment in the fashion of the *xoana*. Above its head is the inverted word $\Omega\epsilon\delta$; at the right the number (?) IV, at the left traces of a hasta. (L. SAVIGNONI, *Not. Scavi*, 1898, pp. 3-5.)

SASSOFERRATO. — Terra-cotta Temple-sculptures. — On the hill called Civita Alba have been discovered some remarkably striking fragments of terra-cotta sculptures belonging apparently to the pediments and frieze of some temple. One set of the fragments, apparently from the pediments, represents scenes from the Dionysiac cycle, — the discovery of Ariadne by Dionysus and his retinue (apparently duplicated, but with difference of detail), and perhaps the marriage of the two. Figures from the frieze depict a battle with Gallic soldiers, perhaps referable to the time of the battle of Sentinum. The sculptures are of the second or third century before our era, and are noteworthy examples of Italo-Etruscan art. (*Not. Scavi*, 1897, pp. 283-304; cuts. Cf. *Athen.* September 11, 1897.)

MONTEPULCIANO. — Tombs. — Chamber-tombs, excavated in the native tufa, have recently been discovered in the district of Acquaviva, yielding as funeral furnishing, for the most part, vases of *bucchero grosso* and a few pieces of Italo-Corinthian ceramics. The most important of these tombs contained an ordinary black-figured *amphora*, used as a cinerary urn. (*Not. Scavi*, 1897, pp. 386, 387.)

Tombs in the form of chambers and of niches have been explored. Of the former, the most important is composed of two rooms; the larger, the original tomb, contained two skeletons and some grave furniture; the smaller, a funeral urn in which were ashes and burnt human bones. The first is ascribed to the fifth century B.C., the second, to the fourth.

In the niches were funeral urns uninscribed. Eight of them exhibited in relief the conflict of Cadmus with the Sparti, or, as others say, the hero Echelus at Marathon.

Funeral implements, vases, and furniture have been collected (fig.), including a candelabrum with bronze figurine (fig.) 0.09 m. high, reproducing a youth in act of orgiastic dancing. The treatment and arrangement of the hair is soft and feminine. It is ascribed to the fifth century B.C.

At Cerbognona an urn has been unearthed with the Etruscan inscription:

Vel : marci : tinuta

The name Marci has already appeared on two other urns from the same province. (G. PELLEGRINI, *Not. Scavi*, 1898, pp. 19-22.)

FRASCATI. — A Roman Villa. — Remains of a Roman villa of distinction have been disclosed in the locality called *Prata Porci*. Within it were found a considerable number of fragments of marble sculptures, and various other articles of furnishing. Most interesting, perhaps, were some inscribed water pipes, with the name of the owner, L. Nonius Crispinus, *consul designatus* in the year 150 A.D. (cf. Klein, *ad an.* and *C.I.L.* VIII, 2747, 18083, 18234.) (*Not. Scavi*, 1897, pp. 458, 459.)

Tessera. — A tessera of lead has been found in the Villa Torlonia, about 27 mm. in diameter and 1 mm. in thickness. One side is plain. On the other is depicted a running Diana, and the legend *subcura(tor?)*. Such *tesserae* were probably medals distributed at the games of some of the *sodales lusus iuvenalis Tusculani* that existed in ancient Tusculum. (*Not. Scavi*, 1897, pp. 419-420; 1 cut.)

BENE VAGIENNA. — Public Buildings and Tombs. — Excavations on the site of Augusta Bagiennorum, begun two years ago, have been continued in the region of the ancient Forum, and have disclosed some remains of public buildings and a few articles of domestic furnishing. The investigation of a few tombs in the vicinity of the city has brought to light some little pottery and glass of the Roman period and a few coins of the earlier half of the first century after Christ. (*Not. Scavi*, 1897, pp. 441-447.)

MONTEPAGANO. — Find of Bronzes. — A number of bronze articles of domestic furniture were recently found, apparently in a robber's hoard. With them were also a helmet, apparently of barbarian (or possibly Sarcenic?) origin, and a little bust bearing some resemblance to portraits of Augustus. The articles are assigned, chiefly on the basis of the style of the bust and of a lamp, to the first century of our era. (*Not. Scavi*, 1897, pp. 412-417; 4 cuts.)

OSTIA. — Recent Excavations. — These have been carried on in the broad street between the theatre and the barracks of the Vigiles. Imposing walls of brick-work have been uncovered, and a well-preserved public fountain, with a bronze dolphin that served as the jet. The most important find of small ware was a fragmentary slip of bone divided by lines of points to serve as a foot-rule. (*Not. Scavi*, 1897, pp. 519-528; cuts.)

FLORENCE. — Roman House. — At Florence, in the works for the new streets at the centre, important Roman ruins have been found, between the Battistero and the Loggia del Bigallo. They consist of the remains of a large private house of the republican times, showing in the form and disposition of its rooms some remarkable peculiarities of the Tuscan or Etruscan style. The *atrium* or *cavaedium*, the *tablinum*, and some *cubicula* are still quite distinct, while the *vestibulum* and the door seem to have been destroyed or covered by a waste pipe and other constructions of later times. The excavations of the *atrium* brought to light a marble headless dog, recalling the well-known mosaic figures and the common inscription, "Cave canem," of the Pompeian houses. Together with many architectural marble

fragments, some coins and two inscriptions have also been discovered, which show that the house was inhabited until the late imperial times. One of the inscribed stones bears a public decree signed by the Decuriones of Florentia, the other a dedication in honor of a certain Sextus Gabinus and another *cir illustris* whose name is lost. (*Athen.* August 14, 1897.)

LODI.—**Find of Roman Coins.**—Within the past year a peasant on an estate at San Martino del Pizzolano in the territory of Lodi (near Milan) broke with his plough a jar containing more than a thousand Roman bronze coins. Dr. Ambrosoli of Milan examined more than half the number. They are all, with a single exception, *sestertii* or "large bronzes," belonging to thirty-one emperors and *augusti*, ranging from Titus to Volusian. One type alone is new, viz., a *sestertius* of Volusian: obv. [IMP.] C. C. VIB. VOLVSIANO AVG. Laurate draped bust r. Rev. AETERNITAS AVGG. In field, S.C. Eternity standing l. with globe surmounted by phoenix in her l., and with her r. raising the edge of her robe. This reverse is common on the coins of Trebonianus Gallus. (*R. Ital. Num.* 1897, p. 507.)

SICILY.—**Various Discoveries.**—P. Orsi reports the existence of Presiculan cave-dwellings, and buildings of the Byzantine Age, at Pachino; chambers with niches and inscriptions cut in the rock and attributed to a gymnasium at Buscemi; Siculan tombs at Giarratana, and antiques of various times at Chiaramonte Gulfi, where have been found Siculan sepulchres, a Christian necropolis with some inscriptions, and a fine figured and inscribed glass. (*Not. Scavi*, 1898, pp. 35-38.)

BUSCEMI—**Greek Inscriptions.**—At Buscemi, in Eastern Sicily, a find of some Greek inscriptions on the walls of an artificial grotto has induced the Directors of the Museum of Syracuse to excavate on the spot during the last month. Their researches have resulted in the discovery of two other grottos, which were buried under a hard deposit of earth, with a considerable number of inscriptions relating to ephebi scratched here and there on the surface of the rock. These records point evidently to the seat of a gymnasium or ephebic college, belonging to some ancient Greek city of the neighborhood. A discovery of the same sort was announced in another Doric country a few months ago by Dr. Hiller von Gärtringen, after excavation in the island of Santorin. There also the large cave supposed by Boeckh and Ross to be a sanctuary of Poseidon has proved by inscriptions to be simply a rear room of the gymnasium of Thera. The best preserved among the Buscemi inscriptions have been seen out from the rocks and placed in the Museum of Syracuse. (*Athen.* December 18, 1897.)

MODICA.—**Early Graves.**—From Modica, in Sicily, Professor Orsi announces the discovery of several prehistoric stone-pits; some of them—as is shown by the numerous skeletons found on the spot—have been used as burial places. Among the objects which came to light during the excavations are to be noted some stone knives; a great number of very primitive

earthen vessels, showing for the most part the characteristics of the so-called first Sicilian period; a vase of the Dipylon style; and the fragments of a hydria with geometrical decorations. (*Athen.* August 14, 1897.)

PALAZZUOLO-ACREIDE.—**Coins.**—A coin-hoard of four hundred and sixty silver pieces, chiefly Corinthian didrachms, with the Pegasus reverse, is described, with four cuts and a list of the appended legends, in *Not. Scavi*, 1897, pp. 436-437.

LICODIA EUBEA.—**Necropolis of the Fourth Period.**—P. Orsi announces briefly the discovery at this place of the first necropolis that can clearly be assigned to the flourishing period of Sicily (seventh to fifth century B.C.). (*Not. Scavi*, 1897, pp. 327-328.)

IGLESIAS (SARDINIA).—**Inscription of Claudius (?)**.—D. Vaglieri publishes a fragment of an honorary imperial inscription from a heavy block of limestone reading

AUG · GERMANICO COS · IIII L · F · QVIR · SATVRNINVS
DEDICAVIT

Vaglieri, judging from the form and the letters, assigns it to the first half of the first century after Christ, and conjectures that it may belong with the inscription *C.I.L.* X, 7515, which is a copy. By emending the latter we obtain

ti. clAVD CAESARi AVG GERMANICO
tr. poT VIII IMP XVI COS IIII
.....OCIVM L AEMILIUS L F QVIR SATVRNINVS
fecit idemque DEDICAVIT

(*Not. Scavi*, 1897, pp. 438, 439.)

SPAIN

ELCHE.—**Sculpture.**—A remarkable specimen of ancient sculpture has been found at Elche, ancient Ilici, on the southern coast of Alicante. It belongs to the same class as the statues from Cerro de los Santos. The head and bust of a young woman is represented in the limestone of the country. The work is remarkably fine. The woman wears a severely draped garment, with much heavy jewelry upon her breast, and her headdress consists of a curious pointed cap from which many tassels hang down to her shoulders. At each side of her face is a large wheel-shaped ornament, the diameter of which is nearly equal to the length of her face. Much color is preserved. The work shows very strong Greek influence and at the same time is not Greek. It may be compared with Cypriote and Etruscan art as a mixture of Greek and Oriental elements. This bust was probably a grave monument. It is now in the Louvre. (*L. HEUZEY, C. R. Acad. Insc.* 1897, pp. 505-509; pl.)

FRANCE

MONUMENTS GRECS.—**Fondation Piot.**—The series of *Monuments grecs publiés par l'association pour l'encouragement des études grecs en France* has come to a close with Nos. 23–25, 1895–97. The *Fondation Piot*, furnishing funds for publications similar to those of the *Monuments grecs*, makes the continuance of the series unnecessary.

EDMOND LE BLANT.—At the meeting of the Academy of Inscriptions, July 9, 1897, the President read his funeral oration for the late Edmond le Blant. (*C. R. Acad. Insc.* 1897, pp. 355–364.)

PARIS.—**Remains of the Roman City.**—At Paris, behind the church of Notre-Dame, excavations made for the construction of a private house have brought to light extensive remains of the ancient wall of the city. They were found at a depth of about 5 m. below the actual level of the ground, running on a line of 60 m. between the Quai aux Fleurs, the Rue Chanoinesse, and the Cloître-Notre-Dame, in face of the Ile Saint-Louis. The wall was a strong construction, 3 m. thick, the material of which consists of large stones taken from older Roman buildings. Several blocks, cut in the shape of steps, and covered with inscriptions, are supposed to come—like the pieces found some years ago on the Parvis de Notre-Dame—from the ancient amphitheatre known by the name of Arènes of the Rue Monge. The inscriptions contain names of citizens of the ancient Lutetia for whom these seats were reserved. A commission appointed by the Académie des Inscriptions et Belles-Lettres in order to examine the discovery has proposed to select the best preserved for the Musée Carnavalet. (*Athen.* February 26, 1898.)

ANTIQUES IN THE LOUVRE.—The *Athenaeum*, December 25, 1897, contains notes from Paris by Eugène Müntz. The Chaldaean collection of the Louvre, created almost entirely by the excavations of De Sarzec at Tello, has been enriched during these last years by a series of monuments of great antiquity. These antedate the reign of Naram-Sin, whom an inscription of King Nabonidus dates as far back as thirty-seven centuries before our era. Among them is a silver vase of the Patesi Entemena, mounted on four feet of copper and decorated with zones of animals; the fragments of the great Stele of victory of King Eneadou, second predecessor of Entemena, the genealogical bas-reliefs of King Our-Nina, the mace of Mesilim, king of Kish, a lance-head of copper, bearing a lion engraved on it and the name of another king of Kish, the terra-cotta cone of Entemena, which preserves one of the oldest historic accounts in the world, and a series of clay tablets where are seen the names as well as the authentic seals of Naram-Sin and his father, Sargani (Sargon the elder), the latter being of an antiquity certainly less great than the succession of reigns established above. In another department the superb bust of a woman, found at Elche in Spain, should be mentioned. The collection of ancient ceramics has also

been much developed. Müntz also discusses Furtwängler's theory that the Medici Torso at the École des Beaux Arts was once the central figure of the eastern pediment of the Parthenon, and decides that the Torso is far too large to have occupied that position.

COLIGNY (AIN).—Bronze Statue.—In the commune of Coligny a fine, life-size, bronze statue was found. The figure is erect and entirely nude. The top of the head is wanting. It was made of a separate piece and riveted on. P. Dissard regards it as an Apollo, J. Buche as a Mars resembling a statuette of a nude Mars wearing a helmet, which was found in 1788 at Oyonnaux (Ain) and belongs to A. Vingtrinier of Lyons. The statue of Coligny has been acquired by the museum at Lyons. (*C. R. Acad. Insc.* 1897, pp. 793 f.; 1898, pp. 9 f.)

Galic Inscription.—With the bronze statue found at Coligny were about one hundred and fifty fragments of two bronze tablets, more than one hundred and twenty of which are covered with Gallic inscriptions. These have been arranged by P. Dissard. The text is in several columns and is divided into paragraphs of fifteen lines each. It is apparently a calendar. (*C. R. Acad. Insc.* 1897, pp. 703 f.; 730, 6 pls.)

AVIGNON.—A Phoenician Inscription.—In *C. R. Acad. Insc.* 1897, p. 672, a translation by Mayer-Lambert is published of a Phoenician inscription found at Avignon. It reads: "Tomb of Zaybeqat, priestess of the Great Lady . . . daughter of Abdechmoun, son of Baaljaton, son of Abdechmoun, wife of Baalhanno, functionary (?) of the gods, son of Abdmelqart, son of Himilcat, son of Abdechmoun, Not (open this tomb)." The importance of the discovery of a Phoenician inscription at Avignon is great. The inscription may belong to the second or third century B.C.

SWITZERLAND

LAUSANNE.—Theft of Coins.—On August 1 last, thieves entered the museum of Lausanne (Switzerland), and succeeded in carrying away a number of valuable coins, including a tray labelled "rare pieces." The coins have not yet been recovered. (*R. Num. Ital.* Vol. X, fasc. 3.)

GERMANY

DÖRNIGWALD.—A Pre-Roman Necropolis.—Excavations have recently been carried on in an interesting pre-Roman burial place, consisting of a group of twenty-three circular mounds, of 10 m. to 20 m. in diameter, and of varying heights in their present condition, up to 1.50 m. They lie in the marshy overflow of the Rhine, though the site must originally have been dry ground. The eight mounds thus far excavated have yielded, beside parts of skeletons, some fragments of pottery with simple, scratched decorations, bronze articles of personal adornment, a gold earring, and a

knife-blade of iron. The period of the interments can hardly be later than the early iron-age, the so-called Hallstatt-period. (*Kbl. Wd. Z. Ges. K.* 1897, coll. 145-148.)

LIPTINGEN. — **A Pre-Roman Necropolis.** — A group of hillocks like those at Dörnigwald, and of the same apparent period, has been examined in the neighborhood of Liptingen, where such interments are not uncommon. They showed unmistakable evidences of cremation. One interesting hillock contained two graves, one of a man, the other of a woman. With the skeleton of the man were found a spear-point and a dagger of iron, a belt of leather with bronze-plate adornments and some pottery. By the skeleton of the woman were found *fibulae* and rings of bronze for neck, arms, and ankles, and necklace and hair ornaments of local jet. (*Kbl. Wd. Z. Ges. K.* 1897, coll. 148-150.)

OSTERBURKEN. — **The Limes-fort.** — Newly found inscriptions aid in proving that the additions to the fort were constructed by the Eighth Legion in 185-192 A.D., while the older fort itself, or a part of it, was built by the Twenty-second Legion. (*Limesbl.* 1897, coll. 667-669.)

WÜRTTEMBERG. — **The Limes of Upper Germany.** — The excavations along this part of the *Limes* during 1896 and 1897 are well described in the *Limesblatt*, the stretch from Petersbuch to Kipfenberg being discussed with especial care, but the investigations appear to have yielded little of much interest to the general student. (*Limesbl.* 1897, coll. 669-680.)

WALDÜRN. — **Limes-fort.** — Excavations of the Limes-fort ("Alteburg") during the year 1897 contributed to the determination of details of construction of that station not hitherto known, especially that it contained no *praetorium* of permanent structure, but had been subjected to perhaps as many as three reconstructions and enlargements. Among the finds of small articles were three pottery-stamps (*Capitolinus*, *Statutus*, *Sodalis*), a small, well-modelled relief of the Medicean Venus on a dish, and part of a relief in sandstone of an Epona, beside a unique and important military inscription mentioned elsewhere. (*Limesbl.* 1897, coll. 649-658.)

BODEN. — **Roman Antiquities.** — The Roman excavations undertaken by Herr Meyer at Boden, in the canton of Aargau, have been continued throughout the present summer. The front of the complex buildings along the ancient Roman road has now been laid bare. The foundations of a long colonnade of pillars, extending for some distance along the side of the road, have been unearthed, which goes far to confirm the belief that Herr Meyer has struck upon the site of some great public building. A short time ago he began excavations upon a fresh spot, to the southwest of the place where he has hitherto been at work; and though the new enterprise is only in an initial stage, some valuable "finds," chiefly in the shape of bronze utensils, have already come to light. The finest of these is a bronze

candelabrum standing on four feet upon a square block of polished granite. A bronze figure of a faun, about 18 cm. high, found on the same spot, is said to be of excellent workmanship. (*Athen.* September 11, 1897.)

SINZENICH. — Inscription. — While preparing to lay the foundations of a paper factory at Sinzenich, the workmen discovered a votive altar of red sandstone, whereon is engraved an inscription on a surface 46 cm. in height, 38 cm. in breadth:

MATRONS TVN ///
MAESTIS · C · FAB ///
/// ONIVS GALLICAN ///
VSLM

Matronis Tummaestis C. Fabonius Gallican(us) v(otum) s(olvit) l(ubens) m(erito)

The letters are 5.50 cm. in height, except in the third line, where they are 5 cm. (*Jb. V. Alt. Rh.* Vol 101, 1897, p. 184.)

COLOGNE. — Roman Graves. — A number of Roman graves have recently been laid bare at Cologne, which have led to the discovery of a large graveyard. The place has been secured from spoliation by an extensive enclosure. (*Athen.* September 4, 1897.)

WIESBADEN. — Römerkastell. — The excavations at the recently discovered "Römerkastell," near Holzhausen in the district of Wiesbaden, have laid open four gates with their towers. Over the northwestern gate, Porta Sinistra, a magnificent inscription in honor of Caracalla of the year 213 A.D. has been deciphered. Traces of a large and not less splendid inscription have been found on the most stately of the four gates, the Porta Praetoria; but it is in too broken and fragmentary a condition to be deciphered. Numerous silver coins of Caracalla, Septimius, and Alexander Severus have come to light, all of which are in excellent preservation; a silver arm-ring, a primitive leaden arm-ring, fragments of glass vessels and of the so-called *terra sigillata*. In the neighborhood of the Praetorium was found the broken head of a *genius* with the mural crown. (*Athen.* September 4, 1897.)

TRÈVES. — A Roman House. — The excavations that have been going on for months past on a plot of ground belonging to Herr Schabb, a manufacturer at Trèves, have resulted in the discovery of a Roman private house, which will excite the interest of antiquaries almost as much as the famous public buildings at Augusta Trevirorum. The front of the house lies parallel with the principal street of the old Roman city. A number of blocks which served as pedestals for the wooden or stone pillars of a portico still remain. The entrance is distinctly recognizable between two buttresses and an immense heap of stones. A long entrance hall running right through the house, from front to back, is intersected by another corridor, so that the

gigantic building is divided into four parts. Side corridors lead into the rooms. Of these the marble tessellated bath-rooms for hot and cold water and warm air lie side by side, and deserve special mention. The two latter were supplied with warm air through subterranean passages. The escape of the smoke was effected by means of hollow tiles laid on one another. The southwestern rooms have cellars under them. In a light court in the same part of the house there is a well-preserved window, the first ever found in a Roman building. The most interesting thing, however, is the magnificent and richly colored mosaic floor, a rarity of the first order. Experts assign the building to the first half of the fourth century, when Augusta Trevirorum attained the zenith of its splendor under Constantine and his sons. (Berlin despatch to *London Standard*, August 12, 1897, quoted in *American Architect and Building News*, January 8, 1898.)

GESELLSCHAFT DER ALTERTHUMSPREUNDE IM RHEIN-LANDE. — At a meeting of the Society of Friends of Antiquity in the Rhineland, December 9, 1897 (Winckelmannsfest), Elter read a paper on *Ancient Rome as regarded in the Middle Ages*, showing how little of the real history of the ancient city was known, and how the legends of Troy and Bible stories were connected with the city. Loescheke exhibited some new possessions of the Academic Museum at Bonn; viz. a ring with three little cups attached to it, the work of a Corinthian potter of the first half of the sixth century, an imitation of a Greek drinking-table of the earliest form, about which the drinkers crouched on the ground, while the mixing-bowl stood in the middle of the ring; an Egyptian alabaster bowl; a bronze statuette of a musician from Alexandria; some early idols from Boeotia; a tripod adorned with animals, also from Boeotia, and perhaps of Chalcidic origin; a terra-cotta from Boeotia, representing Europa upon the bull; and a fragment of a red figured Greek vase of the fifth century B.C., found near Weissenturm, opposite Neuwied. (*Berl. Phil. W.* February 12, 1898.)

ENGLAND

ROMAN REMAINS IN BRITAIN. — In the *Cl. R.* 1898, pp. 83-84, F. Haverfield records the discoveries of Roman remains in Britain in 1896 and 1897. At Aesica, between Newcastle and Carlisle, several inscriptions were found, belonging apparently to the second century after Christ. A building, best explained as a bath, was uncovered, and in it was found a hoard of third-century coins. At the same time, the Vallum was investigated. It apparently belongs to the time of Hadrian, and is coeval with the forts in its line. The Scotch Society of Antiquaries has excavated at Birrens and Ardoch. At Birrens nearly the whole fort was uncovered, the ground plan ascertained, and several inscriptions found. At Ardoch the whole interior of the fort was found to be full of holes, probably left by the wooden uprights which once supported the buildings. At Chester a couple of dedications to the *genius* of (respectively) the Twentieth Legion

and one of the centuries have been found, as well as a row of columns, which may once have fronted some important part of the Praetorium. The excavations at Silchester have been noticed elsewhere (vol. I, pp. 378-380). At Appleshaw a small Roman villa has been found with an inscription to Carinus. It probably belongs to the end of the third century.

SOUTHWARK. — Roman Remains. — At a meeting of the British Archaeological Association, January 19, 1898, an interesting collection of articles connected with Roman cinerary interments was exhibited by Mr. Earl Way, consisting of a fine cinerary urn, terra-cotta lamps, vases, and tear bottles, and other works. With the above remains was found a fine example of a Celtic bronze coin, which bore on its obverse a representation in relief of the head of a chief, and on the reverse a head of a boar, with circular and half-circular symbols in resemblance to what is known as "ring-money." The coin was found with coins of Nero and Claudius, and all these remains were discovered in the course of excavations in the Borough High street, Southwark. (*Athen.* February 5, 1898.)

SOUTH SHIELDS. — Roman Altar. — At a meeting of the Society of Antiquaries, January 20, 1898, Mr. B. Blair reported the discovery of a Roman altar at South Shields. It is mutilated, and the only words left of the inscriptions are IVLIVS VERAX LEGV. The altar has been given to the public library at South Shields. Mr. Romilly Ellen read a paper on metal bowls of the late Celtic and Anglo-Saxon periods, to which he assigned the date from A.D. 450 to 600. (*Athen.* January 29, 1898.)


GREAT CHESTERS. — Remains of Aesica. — Important excavations, under the able direction of Mr. Gibson, of Hexham, are being made by the Newcastle Society of Antiquaries at Aesica (Great Chesters) on the Roman Wall. Last week two altars (one dedicated to Jupiter Dolichenus) and two inscribed stones were disinterred, besides some *denarii* of the earlier emperors. An investigation of the masonry and the bonding of the northwest turret confirms the belief that the *murus* and the camp are of the same date. (*Athen.* September 11, 1897.)

BATH AND GREAT CHESTERS. — Roman Baths. — At a meeting of the Society of Antiquaries, December 16, 1897, J. M. Brydon exhibited a photograph of the remains of the large Roman bath at Bath. B. H. Knowles communicated an account and ground plan of a complete Roman bathing establishment lately laid bare outside the camp of Aesica (Great Chesters, Northumberland). (*Athen.* January 1, 1898.)

APPLESHAW. — Roman Pewter Vessels. — A remarkable discovery of between thirty and forty Romano-British pewter vessels has been made at Appleshaw, near Andover, by the vicar, the Rev. G. L. Engleheart, while digging a trial trench upon the supposed site of a Roman villa. The deposit consists of large circular dishes, bowls of various forms and sizes, cups, jugs, platters, etc. Most of the dishes have incised central ornaments

which are strongly suggestive of the designs of late mosaic pavements. The whole find was exhibited to the Society of Antiquaries at their meeting on the 25th inst. (*Athen.* November 27, 1897.)

At a meeting of the Society of Antiquaries, November 25, 1897, several papers were read. W. Gowland gave an account of his examination of the Roman metallic vessels found by G. H. Engleheart at Appleshaw, of which the chief results are as follows: A pair of the vessels are perfectly preserved, but many are more or less corroded and converted into a whitish mass of tin oxide and lead carbonate. Six specimens were analyzed; of these one was found to consist of tin, and the others of tin alloyed with lead in various proportions, showing that the pewter of the Romans was not a single alloy of tin and lead. Four distinct alloys of tin and lead were found in the vessels analyzed. Some of the vessels from Appleshaw have incised designs filled with a dark material resembling "niello" in appearance. Examination showed, however, that it is not true "niello," but only a black pigment of organic nature.

At a meeting of the Archaeological Institute, December 1, twelve Roman-British pewter vessels, part of the deposit of thirty-three vessels found at Appleshaw, near Andover, were exhibited by C. Edwards. A small dish in the shape of a fish, and having in the centre an ornament of a fish, and a shallow, circular bowl, having the monogram  on its base, show their connection with Christianity. It was announced that the British Museum had acquired the whole collection. Wickham Legg read a paper on the Eastern Omophorion and the Western Pallium. (*Athen.* December 11, 1897.)

BULGARIA

SOFIA.—*Bronze Statuettes in the Museum.*—In the *R. Arch.* XXXI, 1897, pp. 224-237, 34 cuts, S. Reinach describes forty-nine bronzes in the museum at Sofia. They appear to be for the most part of poor workmanship, though some are of considerable interest. The collection at Sofia, under the direction of Mr. Dobrusky, is growing in importance.

ROUMANIA

TOMI.—*Ancient Temple.*—In Küstendje, the ancient Tomi, ground plan and remains of a large building have been uncovered, of which the greater part of the metopes, the gables, the remarkable columns, and the capitals, two stone stairs, and a side wall of twenty metres are preserved. The building was probably thirty metres long. It is the greatest of all buildings as yet found in Roumania, and the government has granted the director of the Roumanian National Museum, Tocilescu, funds for excavations. Tocilescu thinks the building is the temple of Poseidon, which was famous in antiquity. The ancient coins of Tomi represent the temple with the statue of the god. (*Berl. Phil. W.* January 8, 1898.)

AFRICA

CARTHAGE.—Ancient Lamps.—Father Delattre gives in the *Comptes Rendus* of the Academy of Hippo, 1897, pp. xli-xlviii, a classified descriptive list of one hundred and thirty lamps without handles found in 1896 in the course of excavations in the cemetery of the *officiales* at Carthage.

Roman Inscription.—A marble slab, broken into many pieces, has been restored by Father Delattre, and the following fragmentary inscription has been deciphered:

..... ATTI •
 IONT • MAI • XV • S • F •
 PROPRAET • PROV • NVMID •
 pROV • GALLAEc • pRAES • PROV • BIZAC • CONSVLAR •
 PROV • THRAC • CONSVLAR • PROV • SICIL • COM •
 PROCONS • PROV • AFR • AGENS • IVDICIO • SACRO •
 ... peRPROVINCIAS • AFRICANA^s
 ab utROQ • LATERE • reSTITVIT • D
 C • FILIO karthAGINIENS

The slab measures 0.78 m. in height. The beginning of the lines is lost. The letters are 0.06 m. in height. The various functions should probably read [*leg(atus)*] *pro praet(ore) pror(inciae) Numid(iae)*; [*peraequator census*] *pror(inciae) Gallae(c)iae*; *praes(es) pror(inciae) Bizac(enae)*; *consular(is) [provinciae Eu]r(opae), prov(inciae) Thrac(iae)*; *consularis pror(inciae) Sicil(iae)*; *com(es) [ordinis primi]*; *procons(ul) pror(inciae) Afr(icae) agens iudicio sacro*; [*item pe*] *r provincias Africana[s] perfunctus officio pr(aefecturae) pr(aetorio)*. Héron de Villefosse suggests that the person referred to is *L. Aradius Valerius Proculus qui et Populonium*. See *C.I.L.* VI, 1690, 1691; cf. 1692-1694. (*C. R. Acad. Insc.* (November-December) 1897, p. 723.)

Excavations in the Amphitheatre.—In the *C. R. Acad. Insc.* 1897, pp. 694-696, A.-L. Delattre has a brief report of the excavations in the amphitheatre at Carthage in 1896 and 1897. The entire arena has been laid bare. Foundations of nearly all parts of the building have been found, with numerous architectural fragments. A secondary door, probably for the *bestiarii* and the condemned, existed at the north side. It may have been the *porta Libitinensis*. Some sculptured marbles were found, among them a relief of a seated Neptune, a head of a woman, a statuette of Diana, and a torso of an emperor or warrior. Lesser objects are a fine cameo with a head of an emperor in profile, many lamps of various dates, fifty-five leaves of lead with inscriptions, and over two hundred inscribed stones. A plate represents several steps of the amphitheatre with inscriptions.

TEBESSA.—Polychrome Sculpture.—In the *C. R. Acad. Insc.* 1897, p. 692, is a letter from J. Toutain containing a brief notice of some

statuettes and fragments of statues found at Ain-Chabrou, near Tebessa. They are of terra-cotta, covered with a coating of colored stucco. Among them is a head a little less than life size, the flesh parts of which retain traces of flesh-color, while the hair and beard were gilded and the eyes blue. These objects are in the museum at Tebessa.

UNITED STATES

NEW YORK.—**The Marquand Collection of Bronzes.**—Mr. Henry G. Marquand has presented a valuable collection to the Metropolitan Museum.

It is understood that most of these bronzes were found in the neighborhood of Rome. The largest single object is a statue of Publius Septimius Geta, brother of Caracalla, and joint emperor with him until assassinated by Caracalla's order in February, 212, at the age of twenty-three. The statue represents this emperor of a year at about the age of sixteen or eighteen, and is three feet ten inches high. The right hand holds a rod, the left is extended as if the youth were speaking. The work has unmistakable qualities of portraiture, and is conjectured to be from life, inasmuch as it is well known that, after the murder of Geta, his brother caused all discoverable existing representations of him to be destroyed, and forbade the making of others. It is supposed that this statue is one which escaped the proscription of the ruler. The bronze, well though not completely patinated, is in an almost perfect state of preservation.

The most interesting and important object in the collection is the goddess Cybele, or Rhea, enthroned on a four-wheeled chariot drawn by two lions. It was discovered near Rome, and is believed to be not later than an early period of the Empire. So complete a representation of the myth of the goddess, in a form so artistic, and belonging to a period so early, is believed not to exist in any European museum. A diadem is on her head; in her right hand she holds a patera, in her left a tympanum; she sits majestically on her throne, and the stately lions, with heads erect, bear the car along. The group measures, from the rims of the rear wheels to the front of the chariot pole, 3 feet 4 inches. The body of the car is 20 inches long and 8½ inches wide. The lions are each 22 inches in length, and from the feet to the top of the head measure 15½ inches. The height of the piece from the ground to the top of the goddess's head is 22 inches. The seated figure itself is 12 inches in height. It is completely draped, and bears unmistakable traces of gilding, with which the whole figure was originally covered. Elsewhere in the group there are no signs whatever of gilding. The three sides of the throne are ornamented with designs having a somewhat arabesque character. The hubs and spokes of the wheels are also ornamented. The lions are finely modelled. They are at once full of dignity and spirit. The group appears in an excellent state of preservation, but this is due in part to skilful restoration.

Beautiful antiques are two bronze mirrors, each bearing incised figures and ornamentation. One represents Aphrodite advising Helen to listen to

Paris. This was found in a tomb near Perugia. The other mirror has an ivory handle believed to be as old as the mirror itself. The incised figures picture Minerva, Juno, and a satyr. It is of great antiquity, bearing an Etruscan inscription. It was found in a tomb near Chiusi. A small bronze, some 6 inches in height, is a winged Cupid carrying a bow. The whole figure is covered with a smooth, bright green patina. One of the most striking objects is a caricature supposed to be a satire on some famous debauchee of the time. It is a head only about 3 inches in height. Another very interesting object is a head plainly East Indian in its subject, yet Roman in its treatment. It has been labelled an Indian Bacchus. It would seem to indicate more knowledge of India and Indian mythology on the part of the Romans than they have been commonly thought to possess.

One of the supposedly oldest pieces in the collection is a candelabrum composed of a male figure resting on a tripod and supporting a bronze stem. It is of Etruscan origin. Among the other small bronzes are a bull finely patinated; Jupiter enthroned, with uplifted thunderbolt; a bust of Minerva; a Mercury, showing no little skill in the modelling, but far from beautiful, and even suggesting an intention of caricature; a beautiful figure of Venus holding the golden apple; a Roman matron draped and veiled; a pocket-knife, a very curious article, the handle of it carved into a grotesque face, and enclosing an iron blade which it is difficult to believe could ever have been of much use; an ornamental vase with decorated handle; an olpe with a decorated handle, the lid surmounted by a fish; a pair of vase handles surmounted by birds and terminating in masks; a male figure, apparently of some poet or statesman; several bodkins, the handle of one of them being a draped figure with an Etruscan inscription; an Etruscan marine deity; a grotesque figure eating fruit from a basket; fragments of architectural ornamentation from the Pantheon; a specimen of that queer musical instrument, the sistrum, and several other small pieces. (From the *New York Evening Post*, October 27, 1897.)

BOSTON.—**Acquisitions of the Museum of Fine Arts in 1897.**—These are for the most part additions to the Perkins Collection.

SCULPTURES.—(1) *Marble Statue of a Young Apollo*, of life size. The restored parts are the plinth, with the tree trunk which serves as a support for the figure, the left foot and ankle, the right foot and leg below the knee, and the tip of the nose. The arms are missing from just below the shoulders. Apollo is represented as a nude boy, ten or twelve years old. As restored, he stands bending forward in somewhat the attitude of the two bronze statues of youths from Herculaneum, in the Museum in Naples, except that the feet are not so far apart, and the figure rests wholly upon the left foot. The identification as Apollo is based upon the resemblance of the shape of the face and arrangement of the hair to that on the heads of Apollo which are included in the sixth group (pages 149 ff.) of Overbeck's *Apollon*. The face of this statue is the face of a child; and the manner in which the hair is gathered into a knot on top of the head, combined

with the small features, gives it a decidedly feminine appearance, so that, were the head to be seen alone, it might easily be mistaken for that of a girl. Indeed, in both respects, it bears a striking resemblance to the head of the statue of Cora in Vienna, published by von Schneider in the *Jahrbuch der Kunsthistorischen Sammlungen des allerhöchsten Kaiserhauses*, XVI, 1895, pp. 139 ff. and pls. x, xi, the principal difference being that on this head the hair is carried directly from the forehead, while on the Cora it is brushed more to the sides. But the head of this statue never having been broken off, there can be no doubt as to its connection with the figure, and consequently as to its sex.

The statue is briefly discussed by W. Klein in his recent book on *Praxiteles*, p. 367, where the resemblance to the Cora mentioned above is pointed out. The statue itself is evidently a Roman copy, as may be judged from the technique; and the original was probably of bronze, as the pose is hardly one which would have been chosen for a work in marble, because of the necessary introduction of the tree trunk and the supports on the front of the thighs. Height, as restored, not including plinth, 1.275 m.; length of face, 0.137 m.

(2) *Marble Torso of a Goddess*.—This is the fragment of a figure of heroic size, clothed in a thin, clinging chiton, which is girdled by a cord tied in a bow-knot under the breasts, and scarcely veils the modelling of the figure. The edge of the himation is visible on both hips, and this garment probably crossed the front of the figure just below the place at which the fragment was broken off. Only the front half of the figure is represented, the slab or block being finished perfectly smooth on the back. It is probable that the torso was not part of a statue, but of a figure in high relief, affixed to a background. The arms and head were of separate pieces, as the sockets for their attachment show. The masterly freedom of the execution is an unmistakable indication that this is an original Greek work, not a Roman copy; and the heroic character of the figure, as well as the manner in which the lines of the drapery are composed, place it in the period of the great sculptors. In some respects it suggests the statues of the Parthenon, but it is modelled with more appreciation of the softness of flesh than they show, and the lines of the figure under the drapery are less rugged; consequently it probably belongs to the early part of the fourth century rather than the fifth. Height, 0.78 m.

(3) *Marble Head of a Bearded Heracles*, of life size. This head represents Heracles without the exaggerated modelling or the tendency to brutality which characterize the later bearded types of him. The mouth, though strong, is singularly sensitive and refined. Seen from the front, the face bears a strong resemblance to that of the Lateran statue of Sophocles, but there is no doubt about the identity, which is proved by the big neck, the short, curly hair, the small cranium and the swollen ears. The resemblance to the head of the Sophocles is not merely one of feature, but of technique. The modelling of the eyes and their setting, and also of the forehead and cheeks, is so nearly alike in the two heads that they, or their originals, may

not only be assigned to the same period, that is, 350-330 B.C., but with considerable probability to the same master. This head is a fragment, being broken off at the base of the neck. The nose is restored. Total height, without the (modern) plinth, 0.33 m.

(4) *Marble Portrait Bust*, of life size, in the form of a herma. This belongs to the series brought together by Bernoulli, *Römische Ikonographie*, I, pp. 121 ff., as doubtful portraits of Pompey. Certain technical characteristics, however, make it probable that the original from which they are all derived was a Greek work, of a much earlier period; and Studniczka, in the *Berl. Phil. W.* December 14, 1895, p. 1627, has announced his opinion that the person represented is Menander. Our bust was discussed by him at the conference of Archaeologists and Philologists in Dresden in September, 1897, but his arguments for the identification have not yet been made public. Except that the tip of the nose is missing, the bust is intact. Total height, 0.515 m.; length of face, 0.196 m.

(5) *Archaic Greek Lion*, found at Perachora, near Corinth. Of poros, or tufa, said to be of a local variety. This lion has been published by Paul Perdrizet in the *R. Arch.* 1897, pp. 134 ff. and pl. iv. M. Convert, engineer of the excavations at Delphi, saw it near the place of its discovery, in 1895. He noted "traces de couleur assez vives, bleu et rouge" upon it, but these have since disappeared. There are, to be sure, patches of a reddish paint upon some parts of it now, but they are not of the ancient shade of red, and are due to carelessness in coloring the restored and patched places. The legs, body, plinth, and tail have suffered little and have undergone no repairs, but the head has been considerably broken, especially about the face, though it has been repaired mostly with the original pieces. The principal restorations are the filling of a hole in the forehead, a considerable part of the band above it, a number of the locks on the top of the head, the left ear, and a few places in the mane, especially under the chin. Height, including plinth, 0.953 m. Length of plinth back, 0.52 m.; width of plinth, 0.245 m.

VASES: EARLY TYPES. — (1) *Dipylon Pyxis*, of the usual shape, flat, and with cover, on which is modelled a horse as a handle, in addition to the knob in the centre, over which he stands. The principal decoration is a meander which encircles the sides; but the bottom, interior, and cover are also profusely decorated with lines, bands, and geometric patterns. The cover and rim have two holes on each side for the strings by which one was fastened to the other. Broken and repaired, with slight restorations. Diameter, 0.256 m.

(2) *Dipylon Oenochōē*. — Body spherical, flattened at the bottom, neck thin and of medium length, mouth trefoil, and handle flat, running perpendicularly from the lip to the shoulder. Clay warm red, and decorations dark brown. These consist of a band of concentric circles, connected by curved lines, around the middle of the body, with bands, lines, and zigzags above and below them, and also on the neck. On the front of the neck is a meander, and on the shoulder triangles composed of cross-hatched lines. On the front are two small breasts modelled in relief. Intact. Height, 0.331 m.

(3) *Low, Flat Dish or Stand*, of Dipylon ware. Clay pink. Shape like the saucer of a flower-pot, with a row of pointed bosses around the outside of the rim. The interior painted brown. On the outside, circles drawn roughly on the bosses, with short vertical lines between them; and on the bottom, inside of two large circles, a swastika, the outer lines of which are curved, following the lines of the circles. On one side are two small holes, close together, for the string by which it was suspended. Practically intact. Diameter, 0.165 m.

(4) *Boeotian Bowl*, with tall base. Two handles. The form and technique are precisely like those of the vase published by Böhlau, *Jb. Arch. I.* 1888, p. 334, fig. 6, the clay being red, covered with a cream-colored slip, and the decorations in brown and red. The decorative scheme is practically the same, with the broad band of eagles, flying upside down, around the body. The minor decorations, though similar in character, are not identical, the most important difference being that in two instances the eagles are separated by a primitive form of guilloche instead of angular patterns. In the field, near the head of each eagle, is a device; in one case a swastika, in the others inverted triangles. Interior, stripes of dark brown. Height, 0.253 m.; diameter, without handles, 0.30 m. Broken, and repaired without restoration. A small piece of the foot missing.

(5) *Boeotian Bowl*, without base. Two handles. The principal decoration of the exterior is a band of eagles, flying upside down, three in one panel, two in separate panels. The bands dividing these are composed of combinations of straight lines, zigzags, and spirals. Near the head of each eagle is a device: one a palmetto, one a triangle, and three rosettes of different shapes. Around the rim is the "cymatium" pattern, and below the principal band a border filled with coarse dots, and a border of triangles at the bottom. The foot is missing.

The most important decorations of the vase are in the interior, and make it a notable specimen of Boeotian ware. There are two bands of animals drawn in silhouette, with coarsely incised details. In the upper and broader band, which was left unfinished, are a scorpion, a swan, a boar, and a horse, filling about half the circumference; and in the lower, five dogs chasing a hare. Apparently because this design did not quite fill the space, a bull is introduced in front of and facing the hare, its legs extending into the broad stripe of brown below the design. The drawing of all the figures is crude, and evidently imitative. Broken and repaired; the base restored. Height, 0.13 m.; diameter, without handles, 0.288 m.

(6) *Boeotian Bowl*, without base. Four handles. Principal decoration, a band of eagles (four), flying upside down, each in a panel, with no device in the field. The panels are bordered by elaborate combinations of straight lines, zigzags, and spirals. On the bottom are a star and rosette combined. Interior, broad stripes of brown. Broken, and repaired with slight restoration. Height, 0.101 m.; diameter, without handles, 0.24 m.

(7) *Boeotian Stand* for a vase (*hypokraterion*), decorated with an open-work design. This belongs in the class with that described by Böhlau, *ubi*

supra, p. 341, No. 69, but in shape it is more like a flower-pot with a projecting rim, and the perforations are more elaborate, covering the upper as well as lower half of the surface. The larger, open end is probably the bottom, not the top. The perforated decorations are separated horizontally by three narrow bands encircling the stand, each with a simple zigzag in dark brown. On the top (?) is a cluster of concentric circles, of the same color, and the rim is decorated with lines on both its upper and lower surfaces. Clay pink, not covered with a slip. Height, 0.10 m.; diameter at largest end, 0.124 m.

BLACK-FIGURED WARE.—(8) *Scyphus* of very fine paste, making the vase extremely thin and delicate. Form somewhat like Catalogue No. 482. Color a warm red. The decorations are in the early style of the black-figured period. On one side are two lions sitting breast to breast, with heads turned backward. On the other side is an ornament composed of a cluster of lotus-flowers and palmettos. Details incised; red used extensively. Intact. Height, 0.112 m.; diameter, without handles, 0.161 m.

(9) *Attic Amphora*, body all red; form and minor decorations like Catalogue No. 316 (see Group III, p. 115). Principal designs: *A.* Heracles grappling with the Nemean lion. Heracles wears a cuirass, short chiton, and sword. Behind him, on the left, stands Iolaus, holding a club in his right hand, with his left hand raised. He is bearded, and wears a cuirass and short chiton. On the right, watching the struggle, stands Athena, wearing a high-crested helmet and long garment, and holding a spear and round shield (device a tripod). *B.* Heracles receiving the congratulations of Athena. He stands profile to right, wearing the lion's skin over a short chiton, and a sword. In his left hand he carries his club, and with the right grasps the right hand of Athena, who stands facing him. She wears a high-crested helmet, aegis, and long chiton, and holds a spear in her left hand. Behind Heracles is Iolaus, represented as in *A.*, and behind Athena comes Hermes, bearded, wearing a petasus, chlamys, and high shoes, and carrying the caduceus in his left hand. Broken and repaired; a large piece in *B* restored. Height, 0.408 m. Gift of Mrs. Abbott Lawrence, in the name of J. W. Paige.

(10) *Vase*, of the so-called "plemochoö" shape (Catalogue No. 535), the base rather shorter than the average. The base is extraordinarily heavy in weight for a vase of this size, the margin of the bottom being 126 mm. thick. The rim of the vase itself is like those of the "kothon" type, being carried down into the interior at a sharp angle with the top. The exterior is covered with a black glaze, except around the mouth, where there is a broad band of ornament, the principal motive of which is the tongue-pattern, alternately in red and black. Interior, black. The cover is nicely adjusted and is decorated with a tongue-pattern, red and black, around the handle, and lines and a dotted border around the outer edge. The drawing of all the decorations is carefully done. Intact, except for slight abrasions on the surface. Height, to top of cover, 0.168 m.; diameter, 0.24 m.

RED-FIGURED WARE. — (11) *Large, bell-shaped Crater*, of the severe red-figured style, decorated with two scenes from the Trojan War. This is the splendid vase published by Robert, in his fifteenth *Hallisches Winckelmannsprogramm*, 1891, and by Froehner in *La Collection Tyszkiewicz*, pls. 17, 18. It is also discussed by Hartwig, *Meisterschalen*, pp. 580 f. On one side are Achilles and Memnon, fighting over a fallen warrior, whose name appears from the accompanying inscription to be Melanippus. Behind Achilles is Athena, urging him on, and the wounded Memnon falls into the arms of his mother Eos. On the other side is the battle between Diomedes and Aeneas. The vase was slightly warped in baking, leaving the Aeneas side a little higher than the other. One handle has been broken in several places, but repaired with the original pieces, and only a few small bits of it are missing. The only other damage is a small chip in the rim, above the Melanippus group, from which a fine crack runs down through the middle of the picture into the border below. The clay of the vase is of firm, hard texture, and the glaze is of the best Attic type, a brilliant, metallic gloss, jet black on the greater part of the surface, but shading to dark green in places. Height, 0.452 m.; greatest diameter at top, 0.51 m.

(12) *Cylix*, of the later period of the severe style. Form like Catalogue No. 388. Exterior, black glaze without decorations. Interior, a woman washing her hands at a large flat basin (*louterion*), profile to left. She is dressed in an Ionic chiton, with a large himation over it, and her hair is enveloped in a kerchief. Between her and the stand of the basin is a large vase on the ground. Behind her is a bench or couch with a cloth folded upon it, and above hangs a bag with a three-pointed bottom. In the field, *He παύς καλε*. Surrounding the picture is a meander, interrupted at intervals by a cross in a square panel. The drawing is in the style of Duris. Broken and repaired, with unimportant restorations. Diameter, 0.215 m.

(13) *Oenochoë*, of the early period of the fine red-figured style. Form somewhat like Catalogue No. 352, but with handle curving above the rim. Design, Apollo and Artemis making a libation at an altar. Apollo stands at the left, in front of an Ionic column. He is laureate, and wears a long-sleeved chiton and himation. His quiver hangs at his shoulder. In his left hand he holds a very large cithara, and in the right a phiale, from which he is pouring upon the altar. Opposite stands Artemis, wearing a long-sleeved chiton, with a leopard-skin over it, and a fillet or diadem with points rising from it. At her shoulder is her quiver; in her left hand she holds her bow, and with her right she pours wine upon the altar from an oenochoë. Around the shoulder is a tongue-pattern, and below the picture a meander, interrupted by crosses in squares. Drawing indifferent. Glaze a fine, lustrous black, but poorly applied and streaky. Considerably broken and repaired, with some pieces restored in plaster. Height, to top of handle, 0.348 m.

(14) *Phiale mesomphalus*, of the early period of the fine red-figured style. The interior is surrounded by eight figures, representing men being enter-

tained by *hetaerae*, in groups. The middle figure of the first group is a dancing-girl, who has taken off her outer garment, which lies on a chair beside her, and dances in a chemise, playing upon castanets, and looking coquettishly at a youth who stands at the right, leaning upon his staff, his right hand raised in admiration. He wears a long himation. At the left of the dancer stands another woman, also looking on in admiration. She wears a long Ionic chiton and himation, and holds a long staff. Beyond this group, to the right, is a girl playing the double pipe to a bearded man, who is seated on a chair, his head bent, his left hand resting on his right shoulder, and his right hand supported by a long staff. She has short hair, and wears a sleeveless chiton; he wears an himation. Between them, on the ground, is a *scrinium* or scroll-box. Next are three figures, the middle one a youth seated, profile to left, his face turned to right, looking at a girl who bends forward toward him with pouting lips. She is closely wrapped in an himation which covers both arms, and shows only a bit of the chiton at the bottom. He wears an himation, leans over the back of his chair with his left arm, and holds a long staff in his right hand. Between them, on the ground, is an open chest. On the left stands a handmaid holding a bowl and an *oenochœ*. She is full-draped, and wears a kerchief about her hair. Beside her, on the ground, is a pyxis, and behind the pouting girl is a bird. On the omphalus, in the centre of the vase, is a Nike, full-draped, with long chiton and himation, walking rapidly to left, carrying a sacrificial tray or basket, with three high points, and an *oenochœ*. Around the omphalus is a tongue-pattern, and this is repeated around it on the exterior of the vase, which otherwise is covered with a black glaze, the glaze being of the best quality. Slightly broken, but repaired without restorations, and no piece missing. Diameter, 0.248 m.

(15) *Colossal Scyphus*. — Form like Catalogue No. 377. Etruscan imitation of Greek red-figured ware. (The subjects are possibly an Etruscan version of the death of Aegisthus.) *A*. At the left stands a bearded man, taking leave of his wife. His left hand rests upon her shoulder, and his right is extended towards her. He wears an himation and high shoes. She is heavily draped in a chiton and himation, and wears a turban, large earrings, and necklace. Above them hovers the winged Genius of Death, looking towards the man. He is bearded, hook-nosed, with bushy hair, and two snakes project above his forehead. At the left is possibly a candelabrum, — a short Doric column, with broad base, surmounted by a flame-shaped object; and beside it, in the field, a circle. At the right is an altar or cippus. *B*. The murder of the same man, outside a house. He has been felled to the ground, and looks up at his murderer, a youth, who stands over him with drawn sword, about to strike. Each wears an himation only. The house is represented by a door in the background, with the roof rising above it. In the field, at the right, is a cornucopia. The sides of the vase are filled in with a large palmetto-scroll pattern, and below the decorations a meander encircles it. The figures are drawn coarsely with diluted glaze, making the lines brown. The muscular details are indicated by dotted

lines. Clay rather pale brown. Broken and repaired, with unimportant restorations. Height, 0.385 m.

(16) *Rhyton*. — Late Apulian style, the lower part in the shape of a boar's head. The head is covered with black glaze, and above this the cup is decorated with the characteristic Apulian female head, profile to left, on either side of which is a coarse scroll pattern. Handle slightly broken. Height, 0.203 m. Gift of Mrs. S. D. Warren.

(17) *Small, late Red-figured Oenochoë*. — Apulian. A nude youth walking to left, head turned to right, holding a distaff in his left hand, and a small jug in his right. Over his right shoulder a string of beads. Height, 0.085 m. Gift of Howard P. Arnold.

(18) *Small Olpe*, black without decoration. (On the front a flying Eros, modern.) Height, 0.076 m. Gift of Howard P. Arnold.

(19) *Small Black Pyxis*, with base. Cover missing. Not decorated. Diameter, 0.094 m. Gift of Howard P. Arnold.

(20) *Small, Delicate Attic Scyphus*. — Form somewhat like Catalogue No. 510, but not quite so deep. Interior and exterior covered with black glaze, except at the bottom of the exterior, where there is a band of the natural color, with radiating lines of black. On one side is the owner's name, ΦΙΛΟΧΑΡΗΣ (Philochares), in broad, well-formed Ionic letters (inscription faded, and legible only against the light). Rim slightly chipped, otherwise intact. Height, 0.085 m.

MISCELLANEOUS TYPES. — (21) *Small Lecythus*. — Body, mouth, and top of foot black; neck and shoulder red, the latter decorated with dots and rays. On the body Oedipus and the Sphinx, the figures produced by painting the silhouette red over the glaze, and white over this, the details being incised through the paint, but not through the glaze. At the left stands Oedipus (name inscribed), body turned partly to right, face in profile. He is beardless and nude. In his right hand he wields a club, and his left is held out towards the sphinx, which stands facing him, with left fore paw raised. The sphinx stands on rocky ground, with a rocky elevation rising behind it, represented in the same technique as the figures. The drawing is in the style of the severe red-figured period. Intact. Height, 0.129 m.

(22) *White Lecythus*, of the early period of the fine red-figured style, and especially interesting because of the unusual character of the subject, a young warrior (Achilles?) in ambush behind a tree. He is helmeted, nude, and wears a sword at his side. With his body bent, and his (oval) shield held carefully in front of him, he is creeping on tiptoe towards the tree grasping his spear in his right hand. The figure is outlined in black with fine lines, and the details of the muscles are indicated. The inner side of the shield is painted a brown-red, the trunk of the tree is the same color, and the leaves were apparently purplish, though their color is now blurred. Above the picture is a simple meander; on the shoulder are traces of rays, the color gone. The white is covered with a thin glaze. Considerably broken and repaired, but with unimportant restorations, which do not affect the picture. Height, 0.236 m.

(23) *Large Pyxis*, of unusual shape. With the cover on, it may be described as follows: The body is cylindrical, with slightly concave sides. Above and below this is a broadly projecting ledge, from the upper of which the top rises as a flat dome, and from the lower the bottom makes a corresponding curve to the base, which is in the form of a low foot. The whole exterior, however, down to the lower edge, is the cover, inside of which the vase itself rises to the height of the upper ledge. The top is decorated with delicate vines and egg-patterns, embossed in a paste which was probably gilded. Around the sides are two necklaces of pendants, of the same paste, which are separated by long earrings, and a thin garland encircles the vase above them, also applied in relief. In the centre of the top is a round hole by which the handle was attached. The glaze is greenish and rather thin. Somewhat broken on the edges, but repaired without restoration. Height, to top of cover, 0.315 m.; extreme diameter, 0.34 m.

(24) *Plastic Oenochōē*, with handle and trefoil mouth. The front of the body is in the form of a small figure of young Dionysus, standing. The figure wears long, thin drapery, on which are the remains of white, pink, and blue. In the right hand he holds a small jug; the left, which was extended, is broken off. From either side of the figure project flowers, each modelled separately. The figure stands on a plinth, and the whole vase rests on a flat, square base like those of the Tanagra statuettes. Slightly broken. Height, 0.127 m.

(25) *Phiale*, of Campano-Etruscan fabric, decorated with a medallion in relief in the centre, and grape-leaves and bunches of grapes in relief around it. The medallion, representing Heracles resting (three figures) is precisely like that on the phiale from the vicinity of Orvieto, published by Klügmann in the *Monumenti dell' Istituto* IX, pl. XXVI, 3, and *Annali*, 1871, pp. 18 ff., and it is not impossible that this is one of those referred to in his note 1 of page 19. There are considerable remains of the silver coating with which the vase was originally covered, now of a leaden color. Broken and repaired; a long break in the rim, behind the head of Heracles, has been restored. Diameter, 0.24 m.

(26) *Arretian Bowl*, signed by Bargates as workman of M. Perennius, the two names stamped on opposite sides of the vase. The name of Bargates is spelled in an unusual way, BARGATHI (the T and H being combined); Perennius, M. PERENN (the P and E combined). The designs, in flat relief, are all of a conventional character, principally clusters of palmettos and leaves, connected by crossed spears, with small Argive shields above, and an egg-and-dart pattern a little below the rim. Broken, and repaired with unimportant restorations. Height, 0.113 m.; diameter, 0.158 m.

TERRA-COTTAS.—(1) *Archaic Figure* of the *sanis* type, consisting of a flat, shapeless body, broadening out at the base, with a head, and rudimentary arms and hands affixed. Arms extended forward. There are two long, corkscrew curls on each side of the face, and a row of short curls across the forehead. No remains of color, except patches of the white coating. Slightly broken, and repaired without restoration. Height, 0.27 m.

(2) *Archaic Seated Figure of a Goddess*.—The body consists of a thin layer of clay, bent into a sitting posture, and supported by a brace (of terra-cotta) behind. At the shoulders are two small projections, with rounded ends, which probably represent the back of the chair on which she is supposed to sit. The breasts are modelled. She wears a large *polus*, or crown, and large, round earrings. From either side of the head long zigzag curls, indicated in black, fall to the breasts. There are slight remains of white, red, and black on the *polus* and on the garment. Intact. Height, 0.195 m.

(3) *Nude Youth Riding a Horse*.—Archaic (sixth century). He has long hair, which is painted dark brown, and falls in three heavy braids on either side of the face. On his head is a fillet, with a round ornament on the front. Shoulders broad, hips small. The face and body of a ruddy color. The horse is painted white, with eyes, mane, and other details drawn in black. Collar and reins red, the latter modelled. Only the front half of the animal is represented, the body ending abruptly behind the rider in a flat, upright support, which rises from the base. Broken and repaired, with some restorations, the most important being the lower part of the left fore leg of the horse and the front half of the base. The lower part of the right fore leg of the horse is missing. Base rectangular and flat. Height, 0.15 m.; length of base, 0.09 m.

(4) *Archaic Tanagra Statuette*.—A wood-carrier, seated on the ground in front of his bundle of fagots, at which he looks wistfully, resting his head on his left hand. He is represented as an old man, bald and bearded, his body covered with a long garment. The garment and fagots white; head, hands, feet, and cords binding the fagots, red-brown. Base flat and oval. Slightly broken, and repaired without restoration. Height, 0.065 m.; length of base, 0.072 m.

(5) *Archaic Tanagra Statuette*.—A man seated on the ground, cooking something in a large jug, which rests against a small pile of sticks in front of him. He is watching the jug intently, both elbows on his knees, and holding a long stick in his right hand, as though ready to stir. He wears a flat, broad-brimmed hat, a close-fitting, short-sleeved shirt, indicated only in color, and shoes or sandals. Flesh, hat, and pile of sticks, red-brown; shirt, shoes, and stick in hand, yellow. Traces of black on hair, beard, and jug. Base flat and rectangular. Intact, except the fingers of both hands. The stick in the right hand has been broken off and re-joined. Height, 1.005 m.; length of base, 0.12 m.

(6) *Archaic Tanagra Statuette*.—A woman preparing food (a fish?) on an upright stove. She wears a long, close-fitting garment, and her hair is enveloped in a kerchief, on which is a plaid pattern. The figure and stove are covered with an incrustation, through which patches of red, yellow, and white are visible. On the corner of the stove is a small terra-cotta lamp, indicating that she is working by night. Base, flat and rectangular. Slightly broken and repaired. Height, 0.135 m.; length of base, 0.077 m.

(7) *Archaic Tanagra Group*.—An aged, bearded man, seated upon a chair without a back, holds in his left hand, which rests on his knee, a pome-

granate, and in the right a bunch of grapes, which he offers to a diminutive child who stands in front of him. He is partly bald (hair and beard white) and wears a long, white himation, which is thrown over his left shoulder. Flesh and pomegranate red, hair yellow, grapes now a dark brownish, and the folds of the himation indicated simply by fine lines of black. Child: hair black, flesh white, and long garment of yellow. The seated figure broken off and replaced; otherwise intact. Base flat and rectangular. Height, 0.11 m.; length of base, 0.076 m.

(8) *Large Votive Mask of Demeter*, including the upper half of the figure. Attic, second half of the fifth century B.C. This belongs to the class of terracottas discussed by Heuzey in the *Monuments grecs publiés par l'Association*, etc., 1873, pp. 17 ff., and more briefly by Pottier in his *Statuettes de Terre Cuite*, pp. 61 ff. It is made of an exceptionally thin and fragile layer of clay. The goddess is represented with austere countenance, and thick, conventionalized masses of hair, carried from the parting to the ears and thence to the shoulders. She wears a large polis, chiton and himation, the garments being modelled very flatly. Both hands are held against the breasts; between the thumb and forefinger of the right hand she holds a seed, and between those of the left hand a flower-bud. There are considerable remains of black on the hair, red on the lips and cheeks, and white on the rest of the face, and on the neck and arms, in addition to the white undercoating, which is fairly well preserved on all parts of the figure. The eyebrows, lids, and irises are drawn in black, the lashes in fine, separate strokes. On the upper border of the chiton are traces of a leaf-pattern. Inside the polis, on the back, is a small projection perforated with two holes, showing that the mask was intended to be suspended. Broken and repaired, without restoration. No pieces missing. Total height, 0.438 m.; width at base, 0.375 m.; length of face, 0.10 m.

(9) *Votive Mask of Demeter*, including only the head and neck. Type of the second half of the fifth century B.C. The head is veiled, and less conventional than the preceding, the hair being treated freely and gracefully. The top is perforated by two holes for suspension. Broken and repaired, with slight restorations. The left half of the neck and head, back of the cheek, is missing. Clay much thicker and heavier than that of the preceding. Height, 0.19 m.; length of face, 0.09 m.

(10) *Two Fragments of a Smyrna Statuette*, which was copied from a Polyclitan statue of a youth. These are the head and neck, and the front half of the right thigh, including the knee. The latter shows that the figure was in a standing position, and rested on the right leg. Both fragments bear a strong resemblance, in type and in the character of the modelling, to the well-known terra-cotta Diadumenus published in the *J.H.S.* 1885, pl. 61, though the hair is treated a little more sketchily. What gives them especial interest, however, is the fact that although as unmistakably Polyclitan as that figure, the statuette to which they belonged could not have reproduced either the Diadumenus or the Doryphorus, because the head has not the fillet of the one, and is not held erect as in the other, being bent downwards

slightly towards the left, as in the *Diadumenus*. Therefore we may possess, in these fragments, data bearing upon an unidentified statue by Polyclitus. Both head and leg are hollow. Length of the face, 0.037 m.; length of the inside of the leg to the middle of the knee, 0.09 m. Anonymous gift.

(11) *Large Statuette*, of the Smyrna type, representing Aphrodite in the familiar attitude of the statuettes of the goddess untying her sandal. She is nude, and stands upon the right leg, bending over so as to reach the left foot with the right hand, while balancing herself with her left arm. The usual motive is varied, however, by the fact that she has no sandal on the left foot, and holds the thumb and fingers of her right hand as though about to clasp them around the ankle. The sole of the right foot is flattened in a manner which shows that it rested upon something, and consequently that the figure was not intended to be suspended. But there is at present no base, and no trace of any other object which might have served as a support. She wears a stephane of crescent shape, with small points along the upper edge, and an ivy wreath below it. The face is strongly suggestive of the style of Praxiteles, as it has the "Praxitelean" smile and rather small eyes, with the lower lid drawn forward. The hair is thick, and is carried back loosely over the ears. There are slight remains of white on the stephane and wreath, the left arm, and the right foot; otherwise no color is left, though there are abundant traces of a coating which show that the figure was colored, and has been carefully cleaned. It has been broken into several pieces, but the only parts missing are the back of the head, the thumb and fingers of the left hand, the forefinger of the right hand, and the large toe of the right foot. The modelling is exceptionally good, the flesh being rendered with a softness unusual in terra-cottas; and the proportions of the figure show a hand of much more than ordinary skill. Its size and beauty, and its remarkable preservation, make it one of the most important of the extant representations of Aphrodite in this pose, and it is the most important terra-cotta the Museum has yet acquired. Height, 0.374 m.

(12) *Tanagra Statuette*, fourth century type. A young woman, closely enveloped in her mantle, seated upon a large chair of typical Greek form, with curved legs and rounded back. Her mantle covers her head, as well as body, leaving only the face exposed. There are remains of red on the cheeks and lips, and the mantle appears to have been white or light gray, with broad black borders. The chair is hollow behind. Base, flat and rectangular. Broken, and repaired without restorations. Height, 0.147 m.; length of base, 0.092 m.

(13) *Statuette of Aphrodite*, of good style and execution. She is bending forward and looking down towards the spectator's left. The body rests upon the left leg, the right foot being drawn back and resting on the toes. She wears only an himation, which has fallen below the hips in front, and behind is blown out into a shape suggestive of a shell. Both hands are held near the left side of the head, and there was probably some object in the fingers, which are missing. There is no base. Traces of white on the flesh,

and of pink and blue on the garment. Slightly broken, and repaired without restoration. Height, 0.232 m.

(14-41) *Twenty-eight Flying Erotes*, of the sepulchral type, all said to have been found in the same tomb in Greece. All are more or less draped, and each carries something for either the comfort or entertainment of the deceased, who appears to have been a woman, as the objects carried include a jewel-case, a mirror (in a round mirror case), and vases for the toilet. Among the other objects are two phialae, an amphora (painted vermillion), two spherical vases (gold, necks broken off), a comic mask, two garlands, and a votive half-figure of a goddess, similar in character to No. 8 above. At least four of the figures are musicians. One of these carries a lyre, another is playing the double pipe (he is dressed in Phrygian costume, with hood and anaxyrides, and his wings are of Oriental type, with conventionalized feathers and curled ends); the third is playing cymbals; and the fourth was apparently playing a lyre, but his instrument is gone. Eleven are broken in such a manner that it is impossible to tell what they carried, though the breaks show that they carried something. All the figures are smiling and cheerful, and there is great and charming variety in their action, though the charm consists more in the spirit in which they were treated than in excellence of modelling. In a number of cases the figure itself was made in a mould, and the drapery modelled on the surface afterwards. On the majority the colors are fairly well preserved, especially pink, blue, and flesh-color (with an enamel finish), and on some of the wings and other details the gilding is still brilliant in parts. All have been broken, and on most of them there is still some part missing, such as a foot, a hand, or a wing. Hellenistic period. Average height, 0.10 m.

(42-69) *Twenty-eight Shields*, said to be from the same tomb as the preceding, upon the walls of which they were suspended. Fourteen of them are round (average diameter, 0.088 m.), and fourteen a slender oval (average length, 0.092 m.). Each bears a device, modelled in relief. Of the round ones, six have the head of Helios, surrounded with rays (modelled and gilded); five the head of Medusa, of the fine type, on a bed of scales; two the head of a youth like the Helios, but with a star on either side instead of rays; and one a similar head, wearing what appears to be a flat hat, though it is not easily recognizable. Of the oval shields, seven have a youthful head in the middle of a thunderbolt; four a Medusa head surrounded by scales, in the middle of a shaft; and three the head of a dog, in the middle of a shaft. All the heads have the heavy locks of the Hellenistic period, and all are well modelled. The colors on most of the shields are exceptionally well preserved, except upon the faces, though it is easy to see that these were painted in natural colors. The rims are heavily gilded, and gold is used also on the rays, thunderbolts, etc., and on the hair. Other colors which appear are vermillion, pink, bright blue, greenish blue, white, and violet. Sixteen of the shields are intact, or practically so; of the rest, some have been broken and put together, and others still have pieces missing.

(The fact that there are twenty-eight each of the shields and the Erotes, is merely a coincidence. A number of small fragments which came with them show that the number of neither is complete, as they do not belong to any in this collection.)

(70) *Etruscan Mask of Medusa*, of Hellenistic type, with heavy locks and contracted brow. She is winged (wings partly restored); above the forehead two serpents project (part of one restored); two others project above the ears; and two are tied in a knot at the neck, the heads of which projected at either side of the face, but are broken off and missing. There are traces of a white coating in various parts, of red lines on the edge of the lids, and of yellow in the hair. Broken and repaired, with the restorations noted above. Height, 0.21 m.; length of face, 0.125 m. Gift of Miss E. W. Perkins.

(71) *Fragment of an Early Greek Terra-cotta Cornice*, from Asia Minor, decorated in relief. The fragment includes two griffins of archaic type, with Oriental wings, standing face to face, each with a fore paw raised. Between them is a conventionalized palm tree. Above is a moulding, decorated on its upper face with a simple guilloche, and on its curve with an egg-and-dart pattern, both in relief. On the griffins are patches of a pale yellowish color, on which are loosely-drawn scrolls in black, and patches of a warm orange-red. The same colors appear on the tree and on the moulding above, and the red also on the background. The fragment is broken off at the bottom, so that the feet of the griffins are missing. Length, 0.465 m.; height, 0.22 m. (In two pieces.) Published by Furtwängler, *Neue Denkmäler antiker Kunst*, Munich, 1897, pp. 136 ff., pl. ix.

COINS.—The Perkins Collection has been enriched by the addition of sixty-three coins (sixty-two Greek and one Roman), selected with reference to their importance as works of art. Each one is a remarkably good specimen of its type, as regards both preservation and the condition of the die from which it was struck. They may be briefly summarized as follows, the description being in each case only sufficient to identify the type.

Aenos.—Two tetradrachms, from different dies, with the vigorous, semi-archaic head of Hermes, profile to right, on the obverse.

Aetolia.—Two silver coins; one (weight 162.9 grs.) with a male head (Antiochos III?) on the obverse, and a nude warrior resting his right foot on a rock on the reverse; the other (weight 37.2 grs.) with the head of Atalanta or Aetolia wearing a flat, broad-brimmed hat (*kausia*) on the obverse, and a boar at bay on the reverse.

Alexander the Great.—Two gold staters from different dies, each with the head of Athena on the obverse, and Nike on the reverse. One has the inscription of ΑΛΕΞΑΝΔΡΟΥ ΒΑΣΙΛΕΩΣ; the other ΑΛΕΞΑΝΔΡΟΥ only.

Alexander V (?).—Tetradrachm, with the Heracles type of Alexander the Great, in degenerate style, on the obverse, and a Zeus enthroned on the reverse.

Antigonos (Gonatas?).—Tetradrachm, with the head of Pan in a shield on the obverse, and Athena hurling thunderbolt on the reverse.

Antiochus I of Syria.—Gold stater, with the head of Antiochus on the obverse, and Apollo seated on the omphalos on the reverse.

Athens.—Didrachm of the period 525-430, and late tetradrachm with the reverse type of an owl standing on an amphora, in an olive wreath, and the names ΑΘΕ-ΗΡΑ-ΑΡΙΣΤΟΦ-ΦΙΛΑΝ.

Bruttium.—Silver coin of the third century B.C. (weight 86.1 grs.), with busts of the Dioscuri on the obverse, and the Dioscuri riding prancing horses on the reverse.

Corinth.—Silver trihemidrachm of the middle of the fourth century, with Bellerophon (wearing chlamys and petasus) riding Pegasus on the obverse, and the Chimaera, with an amphora crossing exergue, on the reverse, and letters ΔΙ.

Demetrius Poliorcetes.—Silver tetradrachm, with the head of Demetrius horned and filleted on the obverse, and Poseidon seated, holding trident and aplustre, on the reverse.

Elis.—Silver stater, with the fine head of Hera wearing a stephane decorated with palmettos on the obverse, and an eagle in a wreath on the reverse.

Galba.—A remarkably well-preserved example of the bronze type, Cohen, No. 297, the head of the emperor showing as much fine detail as a cameo.

Hermione.—Silver triobol, with the head of Demeter wreathed with wheat on the obverse, and ΕΡ in a wreath of wheat on the reverse.

Calchedon.—Drachma, with a bearded head on the obverse, and ΚΑΑΧ in a wheel on the reverse.

Calymna.—Didrachm of the fine style, with the head of a young warrior on the obverse, and a lyre in a dotted square on the reverse.

Cyzicus.—Electrum stater of the first half of the fourth century, with Helios kneeling between two horses, tunny-fish below. Reverse, incuse square of mill-sail pattern.

Lysimachus.—Four tetradrachms and one gold stater, from different dies, with the deified head of Alexander wearing the horns of Ammon.

Macedon.—Tetradrachm of the Roman period, with the head of Artemis on a shield on the obverse, and on the reverse a club in an oak wreath, a hand holding an olive branch, and the inscriptions ΛΕΓ-ΜΑΚΕΔΟΝΩΝ and a monogram. (For the Macedonian kings, see under their respective names.)

Messana.—Two coins. A tetradrachm of the fifth century; obverse, a charioteer driving a mule-car, above, a Nike crowning the mules, and in exergue a laurel leaf with two berries; reverse, a running hare above a dolphin, surrounded by the name. Also a bronze coin with the head of Poseidon on the obverse.

Metapontum.—Two silver staters of the first half of the fourth century, —one with a female head, profile to left, wearing a broad diadem ornamented with a meander, and an ivy wreath; the other with a youthful head with ram's horns, profile to right.

Methymna.—Archaic didrachm, with a boar on the obverse, and the head

of Athena in an incuse square on the reverse, her helmet adorned with the fore part of Pegasus; on each side the word ΜΑΘΥΜΝΑΙΟΞ. Later silver coin (weight, 99.3 grs.) with the head of Athena, of fifth century type, on the obverse; and a lyre surrounded by the name, in an incuse square, on the reverse.

Miletus. — Drachma (B.C. 350-334), with the head of Apollo, laureate, on the obverse, and a standing lion on the reverse, with the magistrate's name, ΔΙΟΤΤΟΜΠ[ΟΞ, below.

Mithradates Eupator. — Tetradrachm, with the head of Mithradates, wearing a fillet with long ends, on the obverse, and Pegasus drinking on the reverse.

Paenonia. — Tetradrachm of Audoleon, with the head of Athena, three-quarters front to right, on the obverse, and a horse trotting to right, with loose rein, on the reverse.

Perseus of Macedon. — Drachma, with the head of Perseus on the obverse, and a club in a wreath on the reverse.

Pheneus. — Silver stater, with the beautiful head of Demeter on the obverse, and Hermes carrying the infant Arcas (without the name) on the reverse. (This coin is in an exceptionally fine state of preservation.)

Pherae. — Early drachma, with a man restraining a bull on the obverse, and a horse and fountain on the reverse; and silver stater of Alexander of Pherae, with the beautiful head of Hecate or Artemis, facing, on the obverse, and a warrior galloping to right on the reverse.

Philip V of Macedon. — Drachma, with his head, wearing a fillet, on the obverse, and a club in an oak wreath on the reverse.

Phistelia. — Didrachm, with the head of Hera, facing, on the obverse, and the Campanian bull, with the word FISTLUS (Oscan), on the reverse.

Ptolemy Soter. — Small gold coin (weight, 26.6 grs.), with the head of Ptolemy on the obverse, and an eagle on a thunderbolt on the reverse, with the letters ΑΧ in monogram.

Rhodes. — Two tetradrachms of the fourth century, from different dies, with the splendid head of Helios, almost full front to right; and one of the Hellenistic period, with the head of Helios, radiate, full front.

Samos. — Tetradrachm of the period 394-365 B.C., with the lion's scalp on the obverse, and on the reverse the fore part of a bull with an olive branch behind it, the magistrate's name, ΗΓΗΞΙΑΝΑ[Ξ, above, and the letters ΞΑ and a monogram below. (The coin is like that in the British Museum Catalogue, *Ionia*, pl. xxxv, 14, though not from the same die.)

Sicyon. — Drachma of the fourth century, with the chimaera (under the body ΞΕ) on the obverse, and a dove flying in a wreath on the reverse.

Syracuse. — Of the Syracusan types there are eleven specimens, — four tetradrachms of the archaic period, from different dies, each with the female head surrounded by dolphins on the obverse, and a quadriga, with Nike flying above it, on the reverse (one only has a symbol — a pistrinx — in the exergue); a decadrachm signed by Evænetus; two electrum coins (50 litrae) of the period 345-317, each with the laureate head of Apollo on the obverse

and a tripod on the reverse; a tetradrachm of Agathocles, with the head of Persephone, wearing the hair loose, on the obverse, and Nike crowning a trophy on the reverse; a silver stater of the period 306-289, with the head of Athena, wearing an uncrested Corinthian helmet, profile to right, on the obverse, and Pegasus, with a star above, on the reverse; a gold coin of Hieron II (weight, 67.6 grs.) with the head of Persephone (symbol, cornucopia) on the obverse, and a biga on the reverse; a silver coin (12 litrae) of 215-212, with the head of Athena, wearing a crested helmet, profile to left, on the obverse, and Artemis shooting to left, with a running dog at her side, on the reverse.

Terina. — Silver stater, with a female head, wearing fillet, profile to right, on the obverse, and a winged female figure seated on a square base, profile to left, on the reverse.

Thebes. — Silver stater, with a Boeotian shield on the obverse, and a figure of Heracles, of severe style, kneeling, stringing his bow, on the reverse.

Thurium. — Silver stater of the period 420-390, and distater of the following period, the latter a remarkably fine example, both of the Athena with the Scylla on her helmet and the rushing bull.

Zankle. — Silver drachma of the archaic type, with the dolphin in a sickle on the obverse, and a shell in an incuse pattern on the reverse.

[Photographs of all the coins above described, showing both the obverse and reverse, are sold at the Museum. The price of the complete set, in four plates, is \$2.00.]

In addition to the above, the Museum has received as a gift from Mr. G. W. Hammond, eighteen silver coins, — one of Alexander the Great, the others of various Roman emperors of the first two centuries of the empire.

GLASS. — Six specimens of colored glass vases, of late Graeco-Phoenician types: (1) A small, slender amphora of dark purple glass, with pointed base and two small handles, of exquisite shape; (2) a small, slender amphora of bright blue glass, with pointed base, long neck, and no handles; (3) a small, squat, round vase, with large mouth and one handle, of dark purple glass; (4) a "tear-jug," with pear-shaped body, of dark blue glass; (5) a small phial, with large mouth, of deep rose-colored glass; (6) a squat, round vase, with indented sides and no handles, of rose-colored glass. Not included in the Perkins Collection. (Abridged from EDWARD ROBINSON'S *Report to the Trustees.*)

EARLY CHRISTIAN AND MEDIAEVAL ART

GREECE

Gothic Architecture in Greece. — The Gothic monuments of Greece are to be published by M. Laurent of the French School at Athens. In the mean time, C. Enlart describes four of these monuments, — the Porch at Dafni, the Bell Tower at Mistra, the Church at Chalcis in Euboea, and the Church of Hypapandi at Athens. (*Rev. Art Chrét.* 1897, pp. 309-314.)

DELPHI. — Mediaeval Coins. — In *B.C.H.* XXI, pp. 26-39, M. Caron has given a summary account of four finds of coins of the Middle Ages, which have been made during the excavations at Delphi. The total amounts to more than sixty-five hundred pieces, and is discussed not in the order of discovery, but of probable deposit. Find B contains a total of almost twenty-five hundred pieces, including coins of the Princes of Achaëa from 1245-1334, Dukes of Athens 1280-1308, also Louis IX of France, and others. This hoard must have been buried before 1346, as there are no coins of Robert of Tarentum, who came into power in 1346. The nineteen Venetian coins of 1368-1413 seem to have been mixed with this lot by mistake. Find F is composed in general of coins of the same period, and numbers two hundred and seventy-seven pieces. This hoard seems to have been buried between 1339-1342. Find Δ contains twenty-nine pieces of silver, and to judge by the variety belonged to some condottiere. It also belongs in the early fourteenth century. Find A contains upwards of four thousand pieces, and with the exception of three French deniers, shows only coins of the Greek barons, some of which had already been in circulation for one hundred and fifty years, and Venetian coins from 1328-1413. Three of these hoards seem to have been buried during the great confusion which prevailed in Greece in the early fourteenth century, as a result of the wars of the barons and the invasions of the Catalan Company and the Servians; the fourth was laid away during the period of Turkish attacks. In conclusion a few earlier important discoveries of mediaeval coins are mentioned.

ARMENIA

TREBIZOND. — Byzantine Inscriptions. — In *B.C.H.* XX, pp. 496-501, G. Millet publishes five Byzantine inscriptions from Trebizond. The longest relates to the purchase of the land for a church, called St. John of Petra, after a monastery at Constantinople. It is dated in 1306. Three others are on fountains erected in 1487, 1509, and 1506, apparently after the Greeks had been driven by the Turks into the quarter around the church of St. Philip, outside the walls. The fifth was once on the edge of a wall, and is dated in 1713. Numbers 2 and 5 are in iambic trimeters.

FRANCE

EARLY CHRISTIAN ENGRAVED MARBLES. — In the *Semaine Religieuse de Besançon*, Canon Souchet publishes two very interesting engraved blocks of marble, attributed respectively to the fourth and sixth centuries, one of which has been set in the high altar of the Cathedral of St. John at Besançon. It contains the early Christian symbols of the dove, the lamb, the monogram of Christ, and the Alpha and Omega. Near the circumference is inscribed *Hoc signum praestat populis celestia regna*.

The other engraved block contains the monogram of Christ and the Alpha and Omega, around which is inscribed *Apostuli. Et Martyres Memento*

nostri in conspectu Dñ. In each corner is a fish and an anchor. (*Rev. Art Chrét.* 1897, pp. 508-514.)

FRENCH CATHEDRALS.—In the *Architectural Record*, Vol. VII, No. 1, Mr. Barr Ferree continues his *Chapters on the French Cathedrals of the Provence*; this article treats of the Cathedrals of Senez, and of Apt, two minor Cathedrals almost wholly overlooked by the Historians of Architecture. In Vol. VII, No. 2, of the same periodical, he treats of the Maritime Cathedrals, especially the Cathedrals of Vence, Grasse, and of Fréjus. In Vol. VII, No. 3, he describes the Cathedrals of Marseilles, Toulon, Aige, Maguelone, and Elne.

ANGOULÊME.—**Early Church.**—Near the Cathedral at Angoulême were found the ruins of an early Christian church, dating from the fourth century, known as Notre Dame de la Pesne, or, in Latin, BEATA MARIA DE PAGINA.

An account of this church is published by J. Mallat in *Rev. Art Chrét.* 1897, pp. 322-326.

ROUEN.—**Restoration of the Cathedral.**—The long-intended restoration of the west front of the Cathedral of Rouen is to be proceeded with immediately. (*Athen.* December 4, 1897.)

HOLLAND

DISCOVERY OF COINS.—A very important discovery of coins has been made at Escharen, in the south of Holland, of which Rev. Dr. C. Wilde gives an account in the *Museum*—a Dutch philological paper. The following is a translation:

"At Escharen, a little village about two miles to the south of Grave, a notable discovery was made about the middle of last April. Whilst digging in his field, situated not far from the parish church, a peasant discovered at the depth of about sixty centimetres a little jar of old Franconian workmanship, that proved to contain sixty gold pieces. These coins date, as far as we could make out, from the fifth, sixth, and seventh centuries, and represent not less than thirty-one different types. Some are Byzantine, the majority are of Franconian (Merovingian) origin. Eleven of them are *solidi*, and weigh from three and one-half to four grammes. The rest are *trientes* (one-third *solidus*), some of them being considerably clipped. Thanks to the kind help of Dr. H. J. de Dompierre de Chaufepie, director of the royal collection of coins at the Hague, who showed great interest in the discovery, I was so fortunate as to succeed in determining a good number of the coins. Thus we found a neatly executed and well-preserved *solidus* with the effigy of the Emperor Zeno (474-491), besides several of the second coinages of Anastasius (491-518), Justinus I (518-527), Justinianus I (527-565), Justinus II (565-578), and Mauritius Tiberius (582-602).

"Among the Merovingian coins many are known already from other sources, but still they are rather rare. One *triens* is coined at Choe (Hoei?)

in Belgium), and shows the name of the mint master, Landigisilus; another is the work of Medo(v)aldus, the well-known coiner of Amiens; two others from the workshop of Bertulfus, at Orleans; one comes from Sidon (Sidonensium Civitas) in Wallis. In the imperial collection of coins at Vienna they possess a very old coin, that has on its reverse the words BONCO VNIA CIVITAS. At Escharen six specimens of this kind have been found. The inscription AVDVLFVS FRISIA, not yet explained with certainty, also appears on three pieces.

"Lastly I have to mention, together with several undecipherable coins, a few curiosities that are not to be found in any of the known standard works on coins (Prou, de Belfort, etc.). This is not the place to enter into many particulars about them. I confine myself, therefore, to mentioning the inscription ACO †NIOM (or †NIOMAGO Nimeguen(?)), that is to be seen on several pieces." (C. RAAIJMAKERS, in a letter dated September 20, in *Acad.* October 2, 1897.)

GERMANY

BERLIN.—Recent Acquisitions of the Berlin Museum.—Amongst the recent acquisitions of the Berlin Museum may be mentioned a thirteenth century statue of a king, possibly from the Cathedral of Rouen, and a fourteenth century Madonna from Pisa, though French Gothic in style. (*Rep. f. K.* 1897, pp. 76-78.)

HEIDELBERG.—The Castle Older than Supposed.—While repairing the Heidelberg Castle ruins the other day, some workmen came across a window group, the style of which revealed the fact that that famous castle was not begun in 1411, as heretofore believed, but about two hundred years earlier. (*New York Evening Post*, quoted in *Am. Architect and Building News*, October 23, 1897.)

HUNGARY

Ivories at Buda-Pesth.—H. Semper, in the *Rev. Art Chrét.* 1897, pp. 477-495, continues his careful description of the important collection of mediæval ivories in the National Museum at Buda-Pesth.

ENGLAND

EXETER.—Restoration of the Cathedral.—The remarkable and, until now, unrestored west front of Exeter Cathedral—a sort of screen of niches filled with statues—is under repair, with considerable renewals of the sculptures. As this involves, of course, renovations of this valuable work of art as a whole, no antiquary or artist need stop at Exeter in order to see what fifteenth or sixteenth century carving was like. (*Athen.* September 18, 1897.)

ST. ALBANS.—The Norman Church.—At the meeting of the Society of Antiquaries on December 2, W. Page made a report upon some recent

excavations at St. Albans, from which it appears that the Norman church, erected by Abbot Paul de Caen, did not extend, as has hitherto been supposed, to the present west front. The original Norman church probably resembled Norwich. He also referred to the recent discovery in St. Michael's churchyard, which is within the site of Verulamium, of some remains of a Roman column and of a Roman wall. (*Athen.* December 11, 1897.)

PETERBOROUGH.—*Care of the Cathedral.*—The Dean and Chapter of Peterborough have placed their church under the care of Mr. G. F. Bodley. The appointment is a much better one than was expected, and we hope that it may be regarded as a sign of the growth of a better feeling towards the old building than has been manifested lately by its official custodians. (*Athen.* January 15, 1898.)

RENAISSANCE ART

ITALY

Italian Painters.—In the *Rev. Art Chrét.* 1897, pp. 514-517, M. Gerspach continues his series of articles. (See *Rev. Art Chrét.* 1895, p. 482; 1896, pp. 123-219, on *Unknown or Little Known Italian Painters.*) He adds here some fifty names.

Van Dyck at Genoa.—In the *Archiv. Stor. Arte*, 1897, pp. 281-308, 360-397, Sig. Menotti gives a careful description of the paintings by Van Dyck at Genoa. The articles are abundantly illustrated.

Cosimo Rosselli.—In a recent work published by Tanfani Centofante (*Notizie di artisti tratte dai documenti Pisani*, 1896, pp. 129-130), documentary evidence is given to show that Cosimo Rosselli undertook to paint in fresco a portion of the choir of the Cathedral of Pisa on October 8, 1465, and that on February 8, 1466, he was paid for having painted there a Birth of Christ. Nothing of this now remains. (*Rep. f. K.* 1897, pp. 170-171.)

Italian Maiolica.—Students of Italian ceramic art and admirers of maiolica, will be glad to hear that Frederigo Argnani's new volume, which will be entitled *Il Rinascimento delle Ceramiche Maiolicate in Faenza*, will be shortly ready for publication. Like the professor's former volume, it will be copiously and splendidly illustrated in chromolithography. It will contain an appendix of "documenti inediti" contributed by Carlo Malagola. (*Athen.* September 4, 1897.)

ROME.—*The Borgia Apartments at the Vatican.*—In the *Rev. Art Chrét.* 1897, pp. 499-508, Barbier de Montault republishes, from his works referring to the Vatican, his description of these famous apartments now thrown open to the public.

ABBIATEGRASSO.—*Shrine of Donato del Conte.*—Not far from Abbiategrasso is an oratory in memory of Donato del Conte, a general under Francesco Sforza, who perished in the year 1478. This shrine, interesting chiefly on account of the frescoes of its façade, is published by Diego Sant' Ambrogio in *Arch. Stor. Lomb.* 1897, pp. 348-353.

FLORENCE. — Frescoes by Ghirlandaio. — A most remarkable discovery has just been made in the old Church of the Ognissanti in Florence — the famous frescoes of Domenico Ghirlandaio, which had long been considered as lost, and are thus described by Vasari: "The first pictures painted by Domenico were for the Chapel of the Vespucci in the Church of the Ognissanti, where there is a dead Christ with numerous saints. Over an arch in the same chapel there is a 'Misericordia,' wherein Domenico has portrayed the likeness of Amerigo Vespucci, who sailed to the Indies."

According to Monsignor Bottari's report it was believed that "when the Vespucci Chapel had, in 1616, gone to the Baldonnetti family, the paintings of Ghirlandaio had been covered with whitewash," and these frescoes had, therefore, frequently been searched for in that chapel, but always without success. It was only on February 1st last that Padre Roberto Razzoli dell' Ordine dei Minori Osservanti informed the Inspector of the Florence Monuments that, according to some old document he had seen in his convent, some ancient frescoes, painted at the time when the convent belonged to the Umiliati, ought still to exist in the Church of the Ognissanti: one, he said, in the Chapel of St. Elizabeth, Queen of Portugal, representing a dead Christ; the other, in the Chapel of St. Andrew the Apostle (opposite to the first), representing the Holy Trinity. Two days later the two modest canvases which covered the walls of those chapels — St. Elizabeth of Portugal and St. Andrew the Apostle, painted by Matteo Rosselli — were removed, and the beautiful frescoes actually came to light. The "Dead Christ" and over it the "Misericordia" are undoubtedly by Ghirlandaio; the painter of the Holy Trinity is not yet ascertained. The fact is that the Vespucci family possessed two chapels in the Church of the Ognissanti, and that if the description of that church by Francesco Bocchi in his book *Le Bellezze della Città di Fiorenza*, published in 1591 — the first illustration of the beauties of Florence ever printed, — had been taken into consideration, the frescoes by Ghirlandaio would have been found before. They are described in that book as painted in the "second chapel to the right," and the second chapel to the right is just the one where they actually are.

The "Madonna della Misericordia" is painted in the lunette of the Chapel of St. Elizabeth. Under her mantle, held up by angels, Amerigo Vespucci and his family are kneeling, the men on one side, the women on the other. The figures are two-thirds life-size; Amerigo, a beautiful youth, next to the Virgin, is apparently twenty, the age he was at the time when this fresco was painted.

The "Dead Christ" is under the lunette: the body of the Saviour, the Virgin kneeling, St. John the Baptist, St. Mary Magdalene, and other saints. In the background is the view of Jerusalem and the cross. The faces of the saints are supposed to be portraits; they are all dressed in costumes of the fifteenth century.

The frescoes are well preserved. They are precious not only as works of art, but also as containing the long-sought-for portrait of Amerigo Vespucci, the great navigator, whose fourth centenary Florence is going to commem-

orate with solemnity in the coming spring. (EUGENIA LEVI, in *Athen*. February 19, 1898.)

Michelangelo's Correspondence.—In the *Nation*, October 7, 1897, is a brief account of the Casa Buonarroti in Florence, to which is added the important announcement that the eight hundred letters written to Michelangelo, now preserved in the archives of the house, are to be published by G. Biagi, head of the Laurentian Library. The letters cover the period from 1506 to 1564.

VENICE.—The Lion on the Ducal Palace.—The new year will hardly have got well on its course when to the Doges' Palace in Venice will be restored the great Lion, erected there by Doge Andrea Gritti, who ruled from 1523 to 1538. To Gritti belongs the honor of restoring to Venice all the possessions she had held before the League of Cambrai. Gritti's monument was this Lion, set up before the middle gallery of the palace on the west side, twenty-three metres from the ground. After the fall of the Venetian oligarchy, vandals swept the lion away. The restored work, from the sculptor Urbano Bottasso, represents a majestic beast, at whose side kneels a Doge in robes of state. (*Exchange*, in *American Architect and Building News*, January 8, 1898.)

GERMANY

Albrecht Dürer.—Albrecht Dürer's famous engraving of the Triumphal Chariot of the Emperor Maximilian, is the subject of a careful article by Dr. H. Modern in *Mith. K. K. Oest. Mus.* 1897, pp. 493-499.

Photographs of Paintings in the Museum at Stuttgart.—Those who are interested in the history of painting will be glad to learn that Hoeffe of Augsburg has photographed one hundred and eighty of the paintings in the Museum at Stuttgart. This gallery is especially strong in works of the Swabian school. (*Rep. f. K.* 1897, pp. 195-198.)

BERLIN.—Acquisitions of the Museum.—The Berlin Museum has recently acquired a painting by Ambrogio Lorenzetti, representing The Adoration of the Magi; it has also a finely preserved wooden statue of John the Evangelist, by Veit Stoss. (*Jb. K. P. Kunstsamm.* 1897, pp. 2-3.)

Two glazed terra-cotta Madonnas by Luca della Robbia and a *tondo* of the school of Donatello have also been acquired. The collection of German sculpture is enriched by a statue of St. Stephen by Riemenschneider. To the collection of paintings has been added a panel by Fouquet, a Pietà by Quentin Massys, a St. Sebastian by Marco d' Oggionno, and a landscape by Jacob Van Ruisdael. (*Rep. f. K.* 1897, pp. 76-78.)

AUSTRIA

VIENNA.—Acquisitions of Gallery.—In the *Rep. f. K.* 1897, pp. 133-146, Th. Frimmel gives a catalogue of the paintings acquired by the Gallery of Vienna since 1890.

ABBREVIATIONS

Acad. = Academy (of London). *Am. J. Arch.* = American Journal of Archaeology. *Ami d. Mon.* = Ami des Monuments. *Ann. d. Ist.* = Annali dell' Istituto. *Arch.-Ep. Mitth.* = Archäol.-epigraph. Mittheil. (Vienna). *Arch. Anz.* = Archäologischer Anzeiger. *Arch. Rec.* = Architectural Record. *Arch. d. Miss.* = Archives de Missions Scientifiques et Littéraires. *Arch. Stor. d. Art.* = Archivio Storico dell' Arte. *Arch. Stor. Nap.* = Archivio Storico Provincie Napolitane. *Athen.* = Athenaeum (of London).

Berl. Phil. W. = Berliner Philologische Wochenschrift. *Berl. Stud.* = Berliner Studien. *B. Arch. d. M.* = Bulletin Archéol. du Ministère. *B. Arch. C. T.* = Bulletin Archéologique du Comité des Travaux hist. et scient. *B. C. H.* = Bulletin de Correspondance Hellénique. *B. M. Soc. Ant. Fr.* = Bulletin et Mémoires de la Société des Antiquaires de France. *B. Com. Roma* = Bullettino d. Commissione Archeologica Comunale di Roma. *Bull. d. Ist.* = Bullettino dell' Istituto. *B. Arch. Crist.* = Bullettino di Archeologia Cristiana. *B. Paletn. It.* = Bullettino di Paletnologia Italiana. *Byz. Z.* = Byzantinische Zeitschrift.

Chron. d. Arts = Chronique des Arts. *Cl. R.* = Classical Review. *C. R. Acad. Insc.* = Comptes Rendus de l'Académie des Inscriptions et Belles-Lettres. *C. I. A.* = Corpus Inscriptionum Atticarum. *C. I. G.* = Corpus Inscriptionum Graecarum. *C. I. G. S.* = Corpus Inscriptionum Graecae Septentrionalis. *C. I. L.* = Corpus Inscriptionum Latinarum. *C. I. S.* = Corpus Inscriptionum Semiticarum.

Δελτ. 'Αρχ. = Δελτίον 'Αρχαιολογικόν.

'Εφ. 'Αρχ. = 'Εφημερίς 'Αρχαιολογική. *Eph. Epig.* = Ephemeris Epigraphica.

Gaz. B. A. = Gazette des Beaux-Arts.

I. G. A. = Inscriptiones Graecae Antiquissimae, ed. Roehl. *I. G. Ins.* = Inscriptiones Graecarum Insularum. *I. G. Sic. It.* = Inscriptiones Graecae Siciliae et Italiae.

Jb. Arch. I. = Jahrbuch d. k. d. Archäol. Instituts. *Jb. Preuss. Kunsts.* = Jahrbuch d. k. Preuss. Kunstsammlungen. *Jb. V. Alt. Rh.* = Jahrbücher des Vereins von Alterthumsfreunden im Rheinlande. *J. Asiat.* = Journal Asiatique. *J. Am. Or. S.* = Journal of American Oriental Society. *J. H. S.* = Journal of Hellenic Studies.

Kb. Wd. Z. Ges. K. = Korrespondenzblatt der Westdeutschen Zeitschrift für Geschichte und Kunst. *Kunstchron.* = Kunstchronik.

Mél. Arch. Hist. = Mélanges d'Archéologie et d'Histoire (of French School in Rome). *Athen. Mitth.* = Mittheilungen d. k. d. Archäol. Instituts, Athen. Abth. *Röm. Mitth.* = Mittheilungen d. k. d. Archäol. Instituts, Röm. Abth. *Mon. Antichi* = Monumenti Antichi (of Accad. d. Lincei). *Mon. Mém. Acad. Insc.* = Monuments et Mémoires pub. par l'Acad. des Inscriptions, etc. *Mus. Ital.* = Museo Italiano di Antichità Classiche.

Not. Scavi = Notizie degli Scavi di Antichità. *Num. Chron.* = Numismatic Chronicle. *N. Arch. Ven.* = Nuovo Archivio Veneto.

Pal. Ex. Fund = Palestine Exploration Fund.

Rend. Acc. Lincei = Rendiconti d. r. Accademia dei Lincei. *Rep. f. K.* = Repertorium für Kunstwissenschaft. *R. Arch.* = Revue Archéologique. *R. Crit.* = Revue Critique. *R. Art Chrét.* = Revue de l'Art Chrétien. *R. Hist. d. Rel.* = Revue de l'Histoire des Religions. *R. Or. Lat.* = Revue de l'Orient Latin. *R. Ét. Gr.* = Revue des Études Grecques. *R. Num.* = Revue Numismatique. *R. Sém.* = Revue Sémitique. *R. Ital. Num.* = Rivista Italiana Numismatica. *R. Stor. Ital.* = Rivista Storica Italiana.

Sächs. Ges. = Sächsische Gesellschaft (Leipsic). *S. G. D. I.* = Sammlung der Griechischen Dialekt-Inschriften. *S. Rom. d. Stor. Pat.* = Società Romana di Storia Patria. *S. Ant. Fr.* = Société des Antiquaires de France. *Soc. Ant.* = Society of Antiquaries. *S. Bibl. Arch.* = Society of Biblical Archaeology.

Z. D. Pal. V. = Zeitschrift des deutschen Palestina Vereins. *Z. Assyri.* = Zeitschrift für Assyriologie. *Z. Bild. K.* = Zeitschrift für Bildende Kunst. *Z. Num.* = Zeitschrift für Numismatik.

NOTES ON ORIENTAL ANTIQUITIES

1. THE HORSE IN ANCIENT BABYLONIA

PROFESSOR MASPERO says in his *Dawn of Civilization* (English translation), p. 32: "If Egypt is a land of imported flora, it is also a land of imported fauna, and all its animal species have been brought from neighboring countries. Some of these—as, for example, the horse and the camel—were only introduced at a comparatively recent period, two thousand to eighteen hundred years before our era; the camel still later." Maspero controverts the opinion of M. Lefébure that the horse was known at the time of the twelfth dynasty or earlier.

As the horse is native to Asia, it was probably domesticated in Babylonia, or at least in the adjoining highlands, before it was domesticated in Egypt. And the passage from one country to the other might—for aught we can see—have been made in a generation or two. The route up the Euphrates, and through Syria to Palestine and Egypt was always open; or, the passage may have been made by a southern route, since all Arabia was doubtless then quite as adapted for the rearing and transport of horses as it is at present. We know that the date palm travelled in the contrary direction, from Egypt, or at least from Africa, to Babylonia at a much earlier period than 2000 B.C. At the time of Sargon I and his son Naram-Sin, we have accounts (*Revue d'Assyr.* IV, p. 77) of cargoes of "dates of Agade" being transported by water from Agade to Shirpurla. But I do not know that we have any account of horses being used in war or for labor as early as the time of Sargon, or, indeed, till a much later period; nor has

the horse been found before a late period in Babylonian or Assyrian art. Hommel says (Hastings's *Bible Dictionary*, art. "Babylonia"): "The horse was unknown to the earliest settlers." But the fact that the Sumerians called the horse 'ass of the East' is no more a proof that they did not have the horse in their early times than the fact that they called the lion *lig magh*, 'big dog,' proves that they did not always know the lion. It only proves that the horse came to Babylonia from the East.

I wish to present some fresh evidence which looks to a much higher antiquity for the domestication of the horse than any yet known to us.

On an extremely archaic shell cylinder (Fig. 1), belonging to the Metropolitan Museum in New York,



FIGURE 1.—SEAL IN THE METROPOLITAN MUSEUM, NEW YORK.
Original size.

we have the representation of a god, probably the elder Bel, riding in a four-wheeled chariot, drawn by a dragon. Of the relation of this seal to the myth of Merodach and Tiamat I have spoken in an article in *The American Journal of Semitic Language and Literature* for January, 1898. I am now only concerned with the chariot, in which the god rides armed with a whip. The dragon is mythical, but this chariot is not. There must have been chariots at the period of the making of this seal, which we can safely assign to a pre-Sargonic period. Now what was the animal which at that early period was used to draw wagons or chariots? Apparently this is a war chariot.

The goddess on the back of the dragon is brandishing the lightnings. We can conceive a wagon drawn by oxen or asses, but not a war chariot so drawn. But, so far as we know, the transport of Babylonia was mainly by boats, not wagons. Indeed I should not have expected war chariots to have been much in use in the alluvial region of Babylonia with its network of canals. While there can be absolutely no question of the genuineness of this cylinder, I confess that it has been far from easy for me to satisfy myself what a war chariot, or even a wagon, could be doing in Southern Babylonia, or how a horse or an ox or a donkey could have been harnessed in a wagon or a chariot at that early period which we are accustomed to call some 4000 B.C., or more, if we follow Nabonidus's chronology, and put Sargon I at 3800 B.C., which may be several centuries

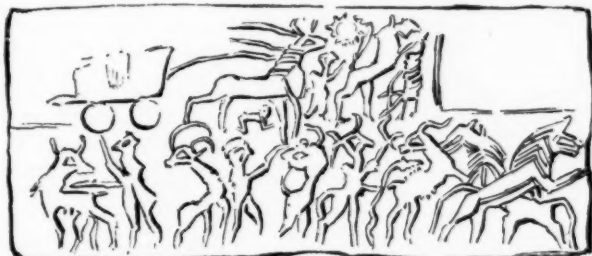


FIGURE 2.—SEAL BELONGING TO W. H. WARD. *Original size.*

too early.¹ I had supposed that the horse must have come from the central uplands of Asia, and that it was probably much later that the domesticated animal was introduced into the Euphrates valley.

But another seal (Fig. 2) lately obtained by me, and equally of incontestable genuineness and of great antiquity, shows us a horse actually harnessed in a similar four-wheeled chariot. The later chariots, of the Assyrian period, were two-wheeled.

¹ C. F. Lehmann, in his *Zwei Hauptprobleme der orientalischen Chronologie und ihre Lösung*, 1898, brings strong evidence to show that Nabonidus's chronology is just one thousand years out of the way.

This is a thick cylinder of white marble, 36 mm. long by 22 mm. thick, and is considerably worn. From the general style of art I should put the date considerably earlier than that of Sargon I. It is a cylinder with the human heads of that peculiar archaic shape which we call "bird-headed," where the nose protrudes like a beak, and the great eye is in the middle of the profile head. The lower register represents the contests between men and animals, which belong to the Sargonic and pre-Sargonic period. Although the cylinder is considerably worn, there can be no doubt that it represents a horse and chariot; the driver, however, is quite lost, except traces of his skirt.

The main question of doubt in reference to this cylinder, and to a number of others not belonging to well-known styles whose local origin we know, is whether it does not come from some of the neighboring countries. We do not yet know the style of the early Elamite art, or that of Gutium, or Mitanni, or Nahrina. We know that the characteristic designs of old Babylonian mythology were accepted as far as Lake Urumia to the northeast and as far as Cyprus to the west. The peculiar arrangement of fighting men and animals may have been put on an Elamite seal, and the horse and chariot may have been rather Elamite than Babylonian. Indeed, we do not know how much of early Babylonian mythology and art, not to say hieroglyphics, may have originated east of the Tigris River. The evidence seems to me to be conclusive that as early as the Sargon period, and probably much earlier, the horse was known to the Babylonians, or at least to their eastern neighbors, even if it was not an animal in frequent use for purposes of war or peace.

2. NEHUSHTAN

So far as I know Oriental archaeology has thus far brought us no illustration of the worship of a serpent on a pole, such as is described as practised by the Jews until the time that Hezekiah put an end to this idolatry by destroying the image of the

fiery serpent set up by Moses. It would seem from the story that this image had been brought with the children of Israel into Palestine; and preserved, possibly worshipped, through all the centuries from Moses to Hezekiah. However extraordinary it may seem to us that Moses should have come so close to fostering idolatry, there can be no doubt that such an image of a serpent on a pole was an object of worship in the times of Hezekiah and his contemporary, Sennacherib, of Assyria.

It might be gathered from the Hebrew account that this worship of a serpent on a pole was a sporadic cult, not to be looked for elsewhere. I have, however, come across other evidence for it which it is worth while to give to the public.

There has lately come into my possession a carnelian seal cylinder (Fig. 3), in an excellent state of preservation (2 cm. in length and 1 cm. in diameter), which is remarkable for several reasons. On it are engraved an *ashera*, crowned with a crescent, a worshipper before a serpent raised on a pole, and three columns of Hittite characters. This is then a Hittite seal, whose age may be from 1000 to 1500 B.C., probably later rather than earlier.



FIGURE 3. — CYLINDER BELONGING TO W. H. WARD. Original size.

What attracts us just now is the serpent. It has a head with one horn projecting in front, two branching horns on the top of its head, and two other horns, or ears, behind them. It is not uncommon to see mythological serpents represented with several horns. The body of the serpent has two circular folds, and it ends with the tail pointing below. The serpent is set up vertically on a short pole, with a stout triangular base for its support. Here we have an undoubted case of the worship among the Hittites of a *nehushtan*, such as is described in the Hebrew history.

Two of the accompanying columns of the inscription begin with the character which Professor Sayce makes to be the sign

for deity. Under it are two other characters which probably indicate a particular god. The first of these two characters is a familiar one, which Sayce supposed to represent the god Sandan, shaped something like a W, and which appears to have taken its shape from a serpent. It is possible that we have here written in the Hittite hieroglyphs the name of the god set on a pole and being worshipped. The middle column is found in other inscriptions, and Jensen imagines it designates a land, Arzaia.

The serpent must have been worshipped at a very early period. We have on the older seals a figure of a seated god, whose body ends with a serpent coil (Fig. 4). I suppose this

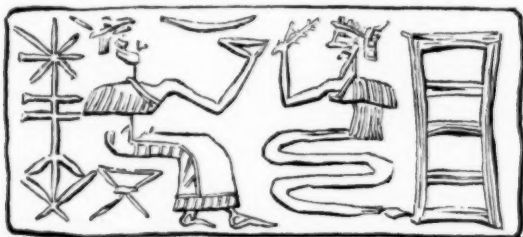


FIGURE 4.—CYLINDER IN THE BRITISH MUSEUM. *Original size.*

is not old Babylonian, but comes from a neighboring region. Egypt knew a similar god (see *Defeneh*, *Egypt Fund*, pl. 25). Yet this is not a common design for a deity. Of course I do not forget the two serpents as a standard forming the Babylonian caduceus, from which was derived the caduceus of Hermes; but this seems to have had its origin in a single serpent regarded as a weapon, carried in the hand by some of the older Babylonian gods, then doubled for symmetry, and not itself a god to be worshipped. So the somewhat frequent emblem of a single vertical serpent does not easily connect itself with any god. The serpent was a celestial emblem, and made a constellation, but still not thus identified with any special god as he was in Greek mythology with the demigod Aesculapius. We know too little of Syrian or Hittite serpent

gods to give any name to the Ophion here represented. We can only say that this serpent on a pole as an object of adoration appears to be a perfect parallel to the Hebrew *Nehushtan*.

3. A HITTITE CYLINDER SEAL

The cylinder (Fig. 5) to which attention is here called is by no means certainly Hittite, although it is one of a class which, for want of other more distinctive attribution, I have provisionally called Hittite. They belong to the period when the wheel, or fiddle-bow, with its various tools, the revolving point or burr, the disc and the cylindrical drill, had taken the place of the freehand cutting, whether on hematite or agate, and the work was generally comparatively coarse. They are usually rather crowded with animals, fishes, and winged figures, and a cuneiform or other inscription is hardly known. The present cylinder, though of this general class, showing also the characteristically Hittite rope pattern, somewhat modified, yet presents certain unusual and interesting peculiarities.

It is a cylinder of magnetic iron, said to have been found at Latakia on the Mediterranean coast of Syria. It is 28 mm. long by 12 mm. in thickness, and thus is somewhat larger and proportionately longer than is common in Hittite cylinders. Between the border lines we find a larger variety than usual of characteristically crowded and confused figures, mostly of animals. There are two gazelles, with heads turned back, fighting each other with opposed horns; a long-horned cow is suckling and licking her calf; a lioness suckles her whelp; and two lions attack an antlered deer. Besides these, there is an eagle with outstretched wings, also numerous little rosettes of dots, an open hand, and a closed fist.



FIGURE 5.—CYLINDER BELONGING TO MRS. HENRY DRAPER. Original size.

Besides these, there is one object which is, so far as I know, here for the first time recognized in our Oriental glyptic art. It is the squid, or cuttlefish, represented between the legs of the two fighting gazelles. The two eyes are distinctly to be seen on the cylinder, though very small. The cuttlefish is quite familiar as depicted on the early "Mycenaean" or Aegean pottery (Fig. 6). It appears on vases from the island of Ialysos, also from Aeolis and Mycenae itself.¹ It belongs to a system of decoration that flourished at some time between 1000 to 1500 B.C. This pottery affected floral and marine

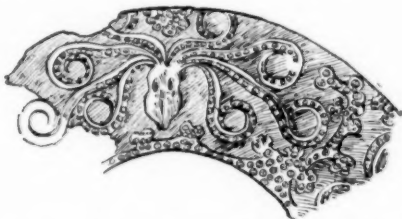


FIGURE 6.—CUTTLEFISH ON MYCENAEAN VASE (Perrot et Chipiez, 'Grèce Primitive,' fig. 487).

forms. Our cylinder has only this one point of distinctive connection with the Mycenaean type, the other figures being of such animals and birds as a people living inland would be familiar with, the same animals that are commonly found on Hittite seals, yet represented with more characteristic combination of activity than is usual, as suckling or fighting. This cuttlefish proves the influence of the art of the seacoast, or islands, and tends to fix the date at 1000 B.C. or earlier.

This occurrence of the cuttlefish helps us to recognize it on a few other cylinders, where I had supposed it to be a peculiar form of the sacred tree. One of these is in Fig. 7; and yet another appears in Lajard's *Culte de Mithra*, pl. xxvii, fig. 1.

¹ See Perrot and Chipiez, *Histoire de l'Art*, VI, 'Grèce Primitive,' figs. 473, 487, 489, 491, 492.

There is one other very remarkable peculiarity of this cylinder (Fig. 5), namely, its brief inscription. I recall no other cylinder of this general type, wrought with the revolving drill, which has any inscription whatever, although I know of at least five cylinders of an earlier period not wrought with the drill that bear Hittite inscriptions; of these four are either in the Metropolitan



FIGURE 7.—CYLINDER BELONGING TO W. H. WARD. *Original size.*

Museum in New York, or still belong to me. One or two others bear Babylonian inscriptions. The inscription on this cylinder has three or, perhaps, four characters. The two middle ones, W and X, are easily recognized as the Phoenician *shin* and *tav*. The two other characters, one on each side, — if they both be alphabetic, — are apparently not Phoenician: they may be Hittite. The one consisting of three nearly parallel vertical lines, *W*, somewhat resembles a Hittite hieroglyph. The other, which somewhat resembles a Phoenician *cheth*, has on each side of it a short line, which also suggests a peculiarity of Hittite writing. Two other possible hieroglyphics appear on the cylinder, but separated, an open hand and a closed fist, both Hittite characters.

While it is not possible, perhaps, to get any meaning, or any certain name out of these four characters, yet we do seem to learn this, that at the time when this style of machine-made cylinders was common, the Phoenician letters had come into use; but that it was at a very early period in the use of the Phoenician alphabet, inasmuch as the two known letters, *W* and *X*, both have their most archaic form, such as they have on the Moabite Stone (885 B.C.) and on the Lebanon inscription of about 1000 B.C. We do not know how much earlier the Phoenician alphabet was in use — perhaps a century or two. This indication confirms our conclusion from the appearance of the cuttlefish; and it helps us to put the date of this cylinder near the lower portion of the period, 1500 B.C. to 1000 B.C.,

which we had already provisionally given. The two combine to give us a date about the time of the Israelite kings, David and Solomon, or perhaps a little earlier. Indeed it is not unlikely that this is the earliest known Phoenician inscription, as it suggests a transition from the Hittite to the Phoenician of the Lebanon bowl.

WILLIAM HAYES WARD.

THE ORPHEUS RELIEF

WOLTERS,¹ in discussing the example of the beautiful relief of Orpheus, Eurydice, and Hermes in the Villa Albani, calls attention to the fact that the figure of Hermes resembles closely the Attic youths as represented on the Parthenon Frieze. The head has the same profile, he says, and he goes on to point to the similarity of the small ears placed rather high on the head, and to the chiton of the Hermes, which is arranged in the same manner as in the case of several figures on the frieze. He adds that the other figures of the relief, alike in their garments and in their tender, exquisite expression, bear the stamp of Attic art of the period of highest perfection, that is to say, the relief must have come into being shortly after the Parthenon Frieze.

Furtwängler, however,² compares the relief with the Cassel torso of "Hephaistos:" "Here the clinging drapery, the fall of the folds between the legs, the delicate folded hem on the thighs, and the folds on the upper arm (cf. the striking agreement between the folds on the right upper arm of the Hermes on the Albani replica and the left upper arm of the torso) are so surprisingly similar that one is inclined to assign both works to one artist," *i. e.* to Alcamenes.

No one will, I think, care to question the likeness in the treatment of the garments of the Hephaistos and of the Hermes which Furtwängler mentions. But it may be well to compare the relief a little more closely with the Parthenon Frieze. Comparing North Frieze, No. 133 (Michaelis) with

¹ *Gipsabgüsse*, no. 1198.

² *Masterpieces of Greek Sculpture*, edited by Miss Sellers, pp. 88, 89.

the Hermes, we discover that not only is the chiton treated in the same manner so far as length, girdle, *kolpos*, and texture of material is concerned, but that the pose of the body in the two cases is quite similar, except that the figure on the frieze faces left instead of right. In West Frieze, No. 23, the chiton again is handled in the same manner as in the Hermes, the character of the folds of the *kolpos* on the two figures being entirely similar. In South Frieze, No. 62, not only is the chiton the same, but the whole pose and bearing of the figure is almost identical with that of the Hermes, though to be sure the right arm of the Hermes does grasp the drapery on the right thigh, the left hand rests on the arm of the Eurydice, and the left foot is not drawn back quite so far in the walking motion.

For such cascade folds as those formed by the left end of the chlamys of Hermes where it hangs down between Hermes and Eurydice, we may look to East Frieze, No. 1, and to West Frieze, Nos. 9, 12, 23.

On the Naples example of the relief, where the end of Hermes's chlamys rests on the leg just below the right knee, we see the "selvage" edge which is so characteristic of the garments on the Parthenon Frieze; cf., for example, East Frieze, Nos. 31, 44, 45, 55.

As mentioned above, Wolters has called attention to the fact that the head of the Hermes closely resembles those of young men on the frieze. Here we may well compare South Frieze, Nos. 26 and 28; the hair of the Hermes curls; otherwise the likeness is striking enough. In fact, the Hermes might have stepped bodily out of the frieze, so close are the resemblances in all points.

In the heads of the Eurydice and the Orpheus, there is a touch of softness in the treatment and a shadow of melancholy, which form a contrast to the serene, ideal, passionless life of the frieze. This pathos seems not to be expressed simply by the attitudes and gestures of the bodies, and by the bowed position of the heads, but this shadow has crept into the faces themselves,

just as in some of the fine grave reliefs of the late fifth and early fourth centuries. Yet the pose of the head and body of Eurydice is exceedingly close to that of the "priest" of the East Frieze (Michaelis, No. 34), and the folds of the garment below the waist on Eurydice seem almost a copy from this figure of the frieze. The long straight folds over the left leg not merely present the same appearance, but also the same variation from the perpendicular, a movement to the spectator's left from the waist to the lower end of the garment. The *diploidion* falls over and conceals the folds of the chiton along the upper portion of the right thigh of the Eurydice. The other folds over her right leg are rather more numerous than the corresponding folds of the priest's garment, and, in general, are more deeply cut. Still, this present greater depth is due in part to the fact that the relief has suffered less from the weather and the hand of time than has the frieze, and perchance to the fact that the relief is a Roman copy and the frieze is a Greek original. These folds on the Naples example bear a closer resemblance to those on the frieze than do the corresponding folds on the Albani replica. For the general effect of the *diploidion* and *kolpos* of Eurydice's chiton, compare East Frieze, Nos. 16, 50, 54, 55, 56. In Nos. 54 and 55, the ample folds of the *diploidion* fall and conceal the upper part of the thigh in the same manner as does the *kolpos* on Eurydice, though the opposite side of the figure is towards the spectator, and the pose in each case is different. The short folds of Eurydice's *kolpos*, as best seen in the Albani replica, at the middle and left side of the body are treated quite in the manner of the frieze. For example, the way which the hollow of a fold runs into a blunt, rounded end and thus stops can be seen on Eurydice's *kolpos* and on East Frieze, Nos. 26, 27, 38, 39, etc.

The figure of Orpheus, however, seems to have no striking counterpart in the extant portion of the frieze. The rings just below the knees (of the Albani example) suggest those on some of the horsemen; cf. South Frieze, Nos. 30, 43, etc. The artist apparently desires to suggest, in Orpheus's chiton, a

slightly finer material than in that of Hermes, but this finer material resembles that on North Frieze, No. 57.¹

The relief is sculptured quite in the manner of the frieze. The outlines of the figures are sharp and clean, cut down perpendicularly, at times almost undercut. The drapery here is less crisp, fresh, and original than in the frieze. This is in part due to the fact that we are comparing copies of an original relief with the original frieze.

Some of the points of similarity mentioned might be accounted for, not on the supposition that the artist of the relief has in the given cases copied the frieze, but from the fact that the artist in each case was imitating or idealizing nature as he saw it, the resemblances being accidental. This may be true in one or two instances, but the resemblances are too many and too exact to admit of this conclusion for the whole. We must infer that the artist of the relief was working in conscious or unconscious imitation of the Parthenon Frieze. The touch of pathos introduced in the relief points, however, to a date not earlier than the end of the fifth century as the probable date of the relief.

An artist of such strong individuality, and of such variety in the types he created as Furtwängler claims in his *Masterpieces* for Alcamenes, could not have been the artist of the relief. Great artists are hardly guilty of such bald plagiarism as we find in the relief. A similar influence of the Parthenon sculptures can be traced in a whole series of grave reliefs of the end of the fifth century, which surely cannot be ascribed to Alcamenes. The Orpheus relief must rather be rated with the best of these. Its sculptor was probably a nameless but skilful artisan. The original may well itself have stood over an Attic grave.

JOHN PICKARD.

¹ For the folds of the chlamys on the figures of Hermes and Orpheus, caused by drawing the garment together that it may be clasped on the shoulder, there is found no exact parallel on the frieze. But if one can judge from the figures as seen in Michaelis there are similar folds on the same portion of the chlamys on West Frieze, Nos. 2, 12, and on South Frieze, Nos. 10, 74.



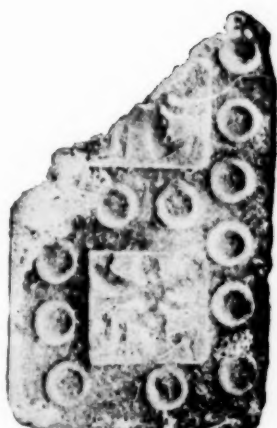
No. 1



No. 2



No. 3



No. 4



No. 5

TERRA-COTTA PLAQUES FROM THE ARGIVE HERAEUM





No. 7



No. 6



No. 8 a



No. 8 b



No. 9



No. 10

American School
of Classical Studies
at Athens

TERRA-COTTA RELIEFS FROM THE ARGIVE
HERAEUM

[PLATES I, II]

THE terra-cotta reliefs, of which a preliminary publication is here given, form a portion of the interesting finds among the objects of the lesser arts which the Argive Heraeum has yielded. These excavations, as will be remembered, were carried on by the American School of Classical Studies at Athens from the year 1892 to the close of the year 1895, the funds for the purpose having been contributed chiefly by the Archaeological Institute of America.

The greater number of these reliefs were found during the first season in 1892, in what we termed the 'black layer' below the foundation walls of the second temple. Though we are not justified in saying that this black layer ran continuously round the foundations of the whole temple, earth of this consistency, containing objects of the same character, was found at so many points in the filling for the second temple that a certain degree of continuity may be assumed. Still, at times, the black earth was found in greater thickness and the objects in greater profusion; so that we were led to use the term 'pockets.' Other specimens were discovered, chiefly on the south and south-west slopes, in the third layer of earth which had been massed as filling for the second temple; so that on the whole, the provenience of all these objects may be designated as the filling below the second temple. The chronology of all objects found in this filling would thus be fixed in the one direction as being prior to the year 423 B.C. The other limit cannot be

determined in the same way by the conditions of excavation; especially as objects manifestly belonging to widely different periods were found together in this filling. We may, however, anticipate and mention one fact which will necessitate fuller exploration on some future occasion, namely, that none of these terra-cottas was found on the same level as the Mycenaean walls erected on the bed-rock below the filling. Further points, in so far as they can now be determined, will be noted, as we examine each individual fragment.

The terra-cotta reliefs will be considered in two groups: first, those that ornamented flat objects of terra-cotta—plaques, tiles, *pinakes*, bricks, etc.; and, secondly, those that evidently formed parts of terra-cotta vessels or vases decorated in relief. We shall in this article confine our study to the former group.

These plaques are ten¹ in number; they are all, with the exception of Nos. 9 and 10, in a more or less fragmentary condition.

1. Winged figure to right, legs in profile, head and body *en face*. Upper left corner missing.

Length, 0.14 m.; width, 0.085 m.; thickness, 0.008 m. Found on the Second Temple Terrace.

2-4. Rectangular reliefs, bordered by incuse circles, the centres of which are raised, enclosing two square fields. In each field a winged figure running or flying to left.

2. Length, 0.07 m.; width, 0.085 m.; thickness, 0.026 m.

3. Length, 0.10 m.; width, 0.085 m.; thickness, 0.027 m.

4. Length, 0.117 m.; width, 0.073 m.; thickness, 0.023 m.

All these were found in or back of the South Stoa.

5. Form similar to No. 2, rectangular field. Two men facing each other with uplifted arms.

Length, 0.096 m.; width, 0.086 m.; thickness, 0.031 m. Second Temple Terrace.

6. Part of rectangular relief, representing bearded man in a chariot, driving a quadriga.

Length, 0.085 m.; width, 0.087 m.; thickness, nearly 0.01 m.

7. Fragment with similar subject, only one horse, much smaller and less well preserved.

Length, 0.069 m.; width, 0.043 m.; thickness, 0.01 m. Both Nos. 6 and 7 from Second Temple Terrace.

¹ An eleventh fragment, similar in form to No. 2, but with only a foot showing in the field, was too much mutilated to be published.

8 *a* and *b*. Two fragments from same relief. Incuse circles as in No. 2, bordering square fields. Also rosette with eight leaves.

a. Fore part of Centaur to right, holding a branch. In field rosettes formed of four leaves and four diamonds alternating.

Length, 0.091 m.; width, 0.079 m.; thickness, 0.018 m.

b. Lower portion of kneeling figure to left.

Length, 0.067 m.; width, 0.056 m.; thickness, 0.02 m. Found back of South Stoa.

9. Small square relief, well preserved. Above an extension pierced by a hole. In field lion to right.

Length, 0.05 m.; width, 0.045 m.; thickness, 0.014 m. From east of Chambers on Second Temple Terrace.

10. Small rectangular relief. Two women in a chariot to right, driving a quadriga. Upper part pierced by a hole.

Length, 0.054 m.; height, 0.046 m.; thickness, 0.01 m. Probably found back of the South Stoa.

All these plaques, with the exception of No. 8, are made of a fine reddish clay. No. 8, however, is made of a very coarse greenish-yellow clay, in which small stones are visible.

The question what purpose these plaques served is not easily determined. There are two classes of ancient metal relief-work: *repoussé*, or beaten work, and pressed, or stamped work. The stamped work, especially in soft and thin gold, was evidently made from a mould¹ upon which the thin metal was pressed. The use of so brittle a material as clay, however hard the baking may have made it, and however thick such brick-like plaques as Nos. 2, 3, 4, and 5 may be, would be strange. Still it is not impossible that the examples just mentioned may have served that purpose. All these reliefs are influenced to some degree by the style suggested by metal work. It is not impossible that they may have served as 'backing' for a thin coating of metal. But this is not likely, because for this the same objection of the softness and brittleness of the material might be adduced. Moreover, there is no trace whatever on their surface that such a covering existed. And, considering the peculiar adhesive effect the oxydization of bronze exerts on extraneous objects (many vases being found at the Heraeum

¹ See a good instance of this in the bronze mould in the Ashmolean Museum, Oxford, published by H. Stuart Jones, *J.H.S.* 1896, p. 323.

to which bronze objects were stuck fast), it is inconceivable that no traces of such a covering should have been found. A specimen of a mould in terra-cotta was found at the Heraeum, 0.11 m. in length, 0.7 m. in width, and about 0.01 m. in thickness, flat on one side and curved on the other. In the flat side were several holes of varying shapes, sunk to a depth of several millimetres. A cast taken from this mould showed a series of objects, one of which undoubtedly represented a mollusc, the *murex*, or purple shell, so common on Mycenaean vases. The artist has made the common mistake in representing this shell sinistral instead of dextral, he has also made the anterior canal too wide. Whether the others represent nuts, fruit, seeds of various shapes, we cannot decide. The nearest analogies to such a mould are found in Naukratis, the so-called 'cake-stamps' (*Naukratis*, I, p. 45, pl. 29), which are clearly of a very late date. Mr. Cecil Smith informs us that there are in the British Museum, thus far unpublished, stamps of a similar shape to ours, but none with the same subject. The presence of the *murex* might point to a somewhat early date for one mould, but there is no further clue to the date.

That all these plaques are *ex votos* is the only natural explanation of their existence at the Heraeum. Nos. 9 and 10 certainly serve that purpose, as the holes in their upper parts for hanging them up show, and Nos. 1, 6, and 7 can hardly be anything else.

The technical method seems to have been the same in all, namely that the clay was stamped while soft, and afterwards fired. Nos. 8 and 9 present the peculiarity of being treated with a sharp knife after firing, in order to express details and to emphasize lines; this is apparent from the knife-marks on the surface of the clay, and from the fact that in several places the outlines have been trimmed down, leaving a fainter line at the back of the relief.

No. 1. This relief is especially interesting in that while, as we shall see, it manifests Hellenic elements, it has traces of Oriental influence more strongly marked than the others.

The subject represented is, at first sight, quite simple. It is a nude, winged figure. The upper part of the body, as well as the head, is in full face, while the lower part from the waist downwards is in profile. This want of unity in composition is the rule with reliefs, as well as figures in the round, of this early period. Such inconsistency in attitude, by a curious effect of conventionalism, survived long after the artists had advanced beyond this point of archaic awkwardness. Ceramic art is a case in point, since not till after the Persian wars was this conventionality abandoned, and instances in sculpture are too numerous to mention.

The head is surrounded by a mass of hair, which falls down to the shoulder on both sides in a heavy, ribbed mass, while over the forehead it lies in waves. On the left eye is a slight indentation which at first sight seems like an iris, but which on a careful examination proves to be merely an indentation in the clay, no such hole being apparent in the other eye. The nose is flat and the mouth hard and straight, a slight effort being made to model the lips and chin. The scheme of the hair is strikingly like that of the Melian or Tenean Apollos.

The wings present this peculiarity that they grow directly from the breast, in front of the shoulders, which they entirely conceal. The arms are comparatively thin, a result, perhaps, of the difficulty the artist found in dealing with several different planes, the arms being drawn behind the wings.

Whether the figure is male or female is difficult to decide, but it is more probably the former. When it is carefully examined the traces of a very short wavy chiton can be discovered, at a slight distance below the waist. Female figures in archaic art are never represented, as far as we know, in a chiton of such shortness. Though there are many points of difference, a comparison of this plaque with the bronze relief from the Acropolis¹ induces us to believe that our figure is male.

The thighs are large in proportion to the body, with careful modelling of the muscles, especially about the knee. The

¹ *J.H.S.* 1893, p. 259, fig. 26.

nates are small in proportion to the thighs, a peculiarity seen also on the Selinus Metope of Heracles and the Cercopes. The legs from the knee downwards are extremely thin, similar to those of the Tenean Apollo. In fact, our relief seems to afford a mixture of the exaggerated muscularity of the Selinus Metope and the slimmness of the Tenean Apollo.

The attitude of the figure is not necessarily that of one walking, but is due rather to the inability of the artist to represent the legs and feet from the front. What the hands hold is distinctly not a wreath, but a conventionalized flower or branch. This forms part of the action itself, since each hand holds an end of the ornament, and it thus becomes a sort of *contaminatio* of a plant and scroll ornamenting the background, introduced at the same time into the action of the figure itself. This action is, in reality, a reminiscence of the well-known 'Thierbändiges-schema,'¹ of which the Persian Artemis,² falsely so called, is a good example. The winged figure in this connection was one of the types adopted by the Greeks and was remodelled to suit their own peculiar needs, since, though the Hellenic character of the Persian Artemis is now established, no one denies that the original type was a foreign importation. The addition of the wings seems to be a feature of the later archaic art,³ since they are certainly unknown as attributes of the human figure in Mycenaean or geometric art, nor do we find them on the 'Island Stones.'

The mythological significance of the relief, if such it has, is not clear to us. We can only say that it is a winged figure treated in an ornamental manner. We use the term 'ornamental' advisedly, with a more literal signification than is generally given; for one of the most peculiar and striking features of this representation is the action of the figure. The winged 'genius' is holding in both hands a mere ornament, a decorative design,

¹ V. Curtius, *Gesammelte Abhandlungen*, II, pp. 110 ff. 'Wappengebrauch und Wappenstil im Alterthum.'

² Studniczka, *Kyrene*, p. 155.

³ Milchhoefer, *Anfänge der Kunst*, p. 86; Tsountas, 'Εφ. Ἀρχ. 1891, pp. 34 f. Cf. Langbehn, *Flügelfiguren*, etc.

which certainly is no implement of use, nor has it any special significance. But the use made of it here is quite distinctive and original. It is as if the decorative feeling of the modeller of the plaque had been so strong that it obtruded itself into his representation of a human figure, becoming an integral part of the attitude and action, at the expense of the logic of representation, as far as the human figure itself is concerned. This introduction of the ornament seems to point to two customs in the decoration or framing of scenes and representations of figures on vases, bronzes, terra-cottas, etc.; namely, the continuous scroll or other ornament bordering these scenes, as with a frame, and the introduction of ornaments into the field or background, which the Germans have called 'Füllornamente.' Such framing bands and 'Füllornamente' are the composite motives which appear to have led the artist to introduce this new form of ornament into the field of this relief.

We have had occasion to cite the 'Persian Artemis' as an analogy to our figure. A direct repetition of the motive of our plaque may be found on a bronze plaque from Dodona,¹ but of a manifestly later date. Here, however, the ornament has been treated in a precisely similar fashion, the ends of the scroll being held in each hand. In spite of the lateness of the Dodona plaque a quasi-Oriental influence may easily be detected. A similar position of hands may be noticed on the Euphorbus plate.²

An almost exact duplicate of our figure may be found on the gold *Hormus* from Camirus.³ Though the centaur, with whom our figure invites comparison, has no wings, the most striking similarity of style is noticeable when we compare the two. The treatment of the hair, body, nates, and legs is identical. The wings are supplied by the Artemis on the same jewel, and, moreover, present the same peculiarity we have commented on before, namely, that they grow directly from the

¹ Carapanos, *Dodona*, pl. xviii, fig. 3.

² Salzmann, *Necropole de Kameiros*, pl. 53; cf. also pl. 26.

³ *Ibid.* pl. 1.

breast, concealing the upper part of the arm and shoulder. Our figure, in fact, might almost be composed out of a combination of the centaur and the Artemis on the *hormus*. This jewel, which is certainly Rhodian work, exhibits more than any other work known to us so marked a similarity of style and technique with our plaque, that for the present we shall content ourselves with merely pointing out this similarity as possibly indicating some very close connection between them. More than this we do not venture to say, since it has not yet been determined whether Rhodians were influenced by Argives, or *vice versa*. It may well be the case that the Rhodian types are derived from Argos, since Camirus, according to legend, was a colony of Argos, founded by the Heraclid Tlepolemus,¹ and was counted as one of the towns of the Doric Hexapolis. The presence, also, of the Argive alphabet in Rhodes is well known. (Cf. the Argive *lambda* on the Euphorbus plate.) As a last comparison we might mention a relief somewhat similar in style, but probably earlier, found at Aegina.² This relief exhibits the greatest similarity in the treatment of the hair. That it is Peloponnesian and not Aeginetan seems fairly evident.

In summing up, we may say that, while our plaque exhibits Hellenic features, especially in the modelling of the figure, the spirit of the composition and the introduction of the wings are distinctly of Oriental origin. Moreover, we find absolutely no Mycenaean or geometrical elements, but those which are characteristic of the early Corinthian vases. We are forced, however, to assign our relief to a slightly later date than those vases which exhibit this 'Thierbändiges-schema,' since the conventional and decorative treatment of the ornament of our plaque, admittedly without a meaning, is certainly later than this *schema*, not earlier. Therefore we may assign it approximately to the beginning of the seventh century B.C. Even in the best period of Greek art such a decorative solecism may be met with, as, for instance, in the beautiful red-figured

¹ Diod. IV, 58; V, 57; Pind. *Ol.* vii.

² Stais, 'Εφ. 'Αρχ. 1895, p. 263, pl. 12.

vase of astragalus shape, signed *Συρίσκος ἐποίησε*, in the Papa Giulio Museum at Rome.

Nos. 2-5. These are all of similar technique and evidently contemporaneous. Fragmentary as they are, we have still enough to show that their dimensions were from 0.10 to 0.12 m. long and 0.7 to 0.9 m. wide. Of all our reliefs, these show the metal influence in a most marked manner, the incuse circles being probably an imitation of the nail heads used to fasten bronze sheathing to wood, while the division into fields, as well as technique, finds its parallel in the series of bronze reliefs from Olympia,¹ Dodona,² the Acropolis,³ and the temple of the Ptoan Apollo.⁴ The subject of the reliefs Nos. 2-4 is the same: two winged figures moving rapidly to the left in the usual 'knie-lauf schema.'⁵ What the objects are they hold in their hands cannot be determined with certainty; that in the right hand is paralleled by a similar object in the hands of the figures on the terra-cotta reliefs from Sicily⁶ of later style. Kekulé, however, refrains from defining them. That in the left hand resembles an axe. To identify these figures as gorgons seems impossible, and we must be content merely to term them winged daemons. They are similar in style to the reliefs from Olympia,⁷ which contains figures called by Furtwängler 'Daimons,' retracting the view he had previously expressed in Roscher's *Lexicon*.⁸ It is impossible to tell whether the figures are male or female, though the latter seems more probable considering their similarity to the figures on the relief previously cited, which are certainly female. It may be here

¹ Furtwängler, *Olympia*, IV ('Die Bronzen'), pl. 37, 38.

² Carapanos, *Dodona*, pl. 16-18.

³ *J.H.S.* 1892-93, p. 249 (A. G. Bather). Wolters, *Athen. Mitt.* 1895, p. 473.

⁴ *B.C.H.* 1892, p. 348, pl. 10, 11 (Holleaux).

A survey of such reliefs is given by De Ridder in his article 'De Ectypis quibusdam aeneis, quae falso vocantur Aegino-Corinthiaca.'

⁵ Curtius, 'Die Knieenden Figuren der Altgriechischen Kunst,' *Winckelmann's Programm*, 1870 (*Gesam. Abhand.* II, pp. 116 ff.).

⁶ Kekulé, *Terra-Cotten von Sicilien*, pl. 55.

⁷ *Olympia*, IV, pl. 39, 699 a, p. 102, no. 1.

⁸ *Ibid.* I, p. 1709, s.v. Gorgonen.

noticed that these figures bear a strong resemblance to the 'Niké of Archermus,' but with the same difference that we shall plainly see when we compare them with gorgons. Such monsters, while generally represented in the 'knielauf schema,'¹ have always the body in profile and head *en face*, and in the case of our figures both head and body are represented in profile. Moreover, our figures are not holding the usual bird or animal. Only one relief in terra-cotta of similar technique, though of different subject, is known to us;² it represents the Persian Artemis in profile, holding a bird in each hand. The incuse circles are precisely similar to our reliefs, and a rosette similar to those on No. 8. Though little connection may be assumed between the Persian Artemis and our daemons, we see that this same Oriental influence was at work at the time of their manufacture.

No. 5. What the subject of No. 5 represents is extremely doubtful, and several interpretations are open to us. It might be a boxing match, if such be the correct identification of the two Olympia reliefs (*Olympia*, IV, pl. 39, 703, 704 a; cf. also Furtwängler, *Bronzefunde*, p. 91), or the similar group on the geometric vase of Copenhagen.³ A certain similarity may be detected if we compare our relief with a group on the well-known Tripod vase from Tanagra in Berlin.⁴ Save that no traces of a wreath can be discovered, the scene on one relief further resembles one of the Ptoan reliefs already cited (*B.C.H.* 1892, pl. xi, 3; No. 45 in De Ridder, *op. cit.*). Again, were it not for the lack of the tripod, a connection might be assumed with the scene on the mould in the Ashmolean Museum we have already referred to. Perhaps we might recognize in it the ἀκροχειρισμός or the preliminaries of the wrestling match. An instance of this may be found on the sarcophagus in Florence,⁵ where two cupids are trying to secure the better

¹ Milchhöfer, *op. cit.* p. 86, fig. 56.

² Lenormant, *Arch. Zeit.* 1866, p. 258, pl. A.

³ Furtwängler, *Arch. Zeit.* 1885, p. 137, pl. 8.

⁴ Loeschke, *Arch. Zeit.* 1881, pl. 3.

⁵ Gerhard, *Ant. Bildw.* pl. 89, also in Baumeister, *Denkmäler*, I, p. 502, fig. 544.

hold on each other's hands. Or perhaps the action of our relief may be only a salutation. More than this we cannot say.

In style there is a closer analogy between this relief and bronze relief work than is the case with Nos. 2, 3, and 4. The treatment of the figures is precisely identical with that of the above-mentioned Ptoan relief, both in the hair and in the build of the bodies. The profiles, too, are similar. Thus the question of dating our plaques becomes much simplified. For, though we cannot say with absolute certainty which of the two is earlier, the fact that they are contemporaneous (at least they would both belong to the same decade) is too evident to be doubted. These bronze reliefs belong approximately to the beginning of the seventh century, which gives us a similar date for our reliefs.

No. 6. This design here seems rather more advanced in style. The subject of a charioteer in his chariot was not only common through Egyptian and Assyrian art, but was a favorite theme throughout the whole Mycenaean period, as is shown by the grave-stelae found by Schliemann at Mycenae. We owe the introduction of the quadriga to the Dipylon period, from which certain features of our relief are evidently derived, namely, the connection of the pole to the wagon by a rope or staff extending from the dashboard.¹ The *ἀντιξ* has the usual curved form seen on Egyptian wagons, and the wheels are the common type found on most of the Dipylon chariots. A counterpart of this group may be found on the François vase,² the figure of Zeus in his chariot at the marriage procession of Peleus and Thetis. In fact, we are in a position to date this relief between the Dipylon period and the François vase. Its Hellenic origin need not be questioned; there is certainly no trace of Ionic influence.

No. 7. The technique of No. 7 is vastly inferior. It has also suffered far more from abrasion. This makes it difficult

¹ Helbig, *Das homer. Epos*, p. 141, note 3, fig. 83. Cf. Furtwängler, *Arch. Zeit.* 1884, p. 108, pl. 8, 4.

² *Wiener Vorlegeblätter*, 1888, pl. 2-4.

to decide whether one or two persons are represented in the chariot, though more probably one is. Doubt also exists as to whether the charioteer is holding the reins or is in the act of shooting an arrow, and from the curious position of the body with regard to the chariot, a certain similarity may be deduced with the marble relief¹ from the Acropolis of the figure mounting a chariot. At all events, the chariot shows the same influence as No. 6. Its chief peculiarity lies in the fact that but one horse is represented; which fact must be assigned to the incompetence of the artist, since never, in Greek art, does a chariot of this form, drawn by one horse, occur.

Nos. 8 a and b. That these fragments fit together is fairly evident; but unfortunately the sides of the fracture, owing to the soft texture of the clay, have been considerably worn away, and thus the breaks, while following the same lines, do not coincide exactly. Still, the foot in the upper right-hand corner of *a* is the continuation of the leg of the figure in *b*. Aside from its peculiar technique, to which we have already called attention, its chief interest lies in the seeming irregularity. Portions of these fields are preserved, two of which are separated by the same incuse circles met with in Nos. 2, 3, 4, and 5. The rosette of *a* falls beneath the field of *b*, being used instead of an incuse circle, as we found in the case of the Lenormant plaque from Mycenae. It is impossible, however, to tell the general form of the relief, how many fields it contained, or what subject is represented. As in the case of Nos. 2 to 5, the connection between this and the metal reliefs is obvious.

The centaur, the chief figure of the relief, is represented with a horse's fore legs, plainly visible, though their lower part is missing. This type of a centaur with the fore legs of a horse is later than that with human fore legs.² When exactly the later type was introduced cannot be determined, there being no distinct dividing line between the two types, which

¹ Collignon, *Hist. de la Sculpture Grecque*, I, fig. 194.

² Roscher, in Roscher's *Lexicon*, II, p. 1076.

often appear side by side.¹ On archaic gems,² however, only the later type occurs. Evidently the two styles continued together for a considerable period. As far as can be judged from other monuments which illustrate the later type, we are justified in regarding our relief as one of the earliest examples of that type.

To restore the kneeling figure is impossible. It suggests faintly the 'Knielauf,' but that can hardly be the motive. The position of the legs resembles to a certain degree that of the figure on the metal relief from Olympia.³ As no trace of a bow or arrow can be found on our figure, its reconstruction as an archer is impracticable. Apart from the carefulness of detail, the dress of the figure is a most interesting feature. The figure wears a broad belt, and above it the lines of the chiton are indicated by incisions in the clay. No trace of any lower garment can be discovered. Whether this, as well as the fact that the sex of the figure is not indicated, points to any intention on the part of the artist to denote a close-fitting under-garment is doubtful. Carelessness again is the probable explanation. This garb is paralleled by the figures on the Vaphio cups,⁴ which wear the broad belt continued below the waist as a sort of breech-cloth, though the upper part of the body is left bare. The portion remaining of the third field is so small that we cannot determine what the figure was. It might be the rear portion of a bird, and the whole a figure of the Persian Artemis type.

While assigning an Hellenic origin to No. 8, we must nevertheless class it among the so-called Oriental Greek style, of which the Argive-Corinthian is a part. The incuse circles we have already discussed; the rosette is a favorite form of decoration all through the 'Corinthian' period, besides occurring on bronze reliefs.⁵ The ornament above the centaur is charac-

¹ For example, on the Assos frieze, Clarke, *Investigations*, etc., pl. 15, 20. See also on a Cyrenean Vase, *Arch. Zeit.* 1881, pl. 11.

² *Arch. Zeit.* 1883, pl. 16, 16.

³ *Olympia*, IV, pl. 40.

⁴ *Εφ. 'Αρχ.* 1889, pl. 9.

⁵ *J.H.S.* 1893, p. 246, fig. 18; *Olympia*, IV, pl. 37, 712.

teristic, and may be found on a Melian vase.¹ Here we have the use of the ornament in the field as an instance of the *horror vacui* so characteristic throughout the 'Corinthian' period, a feature rather lost sight of in the later art. We seem, therefore, justified in assigning this relief to the end of the seventh century, perhaps a little later. Earlier than the spread of the Oriental influence it cannot be.

Nos. 9 and 10. These fragments properly belong together, since both are complete and illustrate admirably the *pinax* form. This in itself would show their connection with the Corinthian *pinakes*² in Berlin, since the *pinax* does not seem to be used prior to this period. The lion on No. 9 is chiefly remarkable for the enormous size of his head in proportion to his body. From the absence of any ornaments in the field, as well as this peculiarity of head, which strongly resembles that of the lions on 'Early Attic' vases,³ we should feel inclined to assign this plaque or *pinax* to a later stage of the Corinthian period, perhaps about the early part of the sixth century. No. 10, on the other hand, shows traces of Dipylon characteristics. In spite of the abrasion from which the relief has suffered, it is evident that two women are represented, but in a more advanced stage than is characteristic of the Dipylon period; the horses, however, show the feeling of Dipylon art. Nothing of the chariot is plain, except that the wheels are probably four-spoked, though even this cannot be decided. No. 10 is to be dated as later than the Dipylon period, but probably earlier than No. 6.

CHARLES WALDSTEIN.
J. C. HOPPIN.

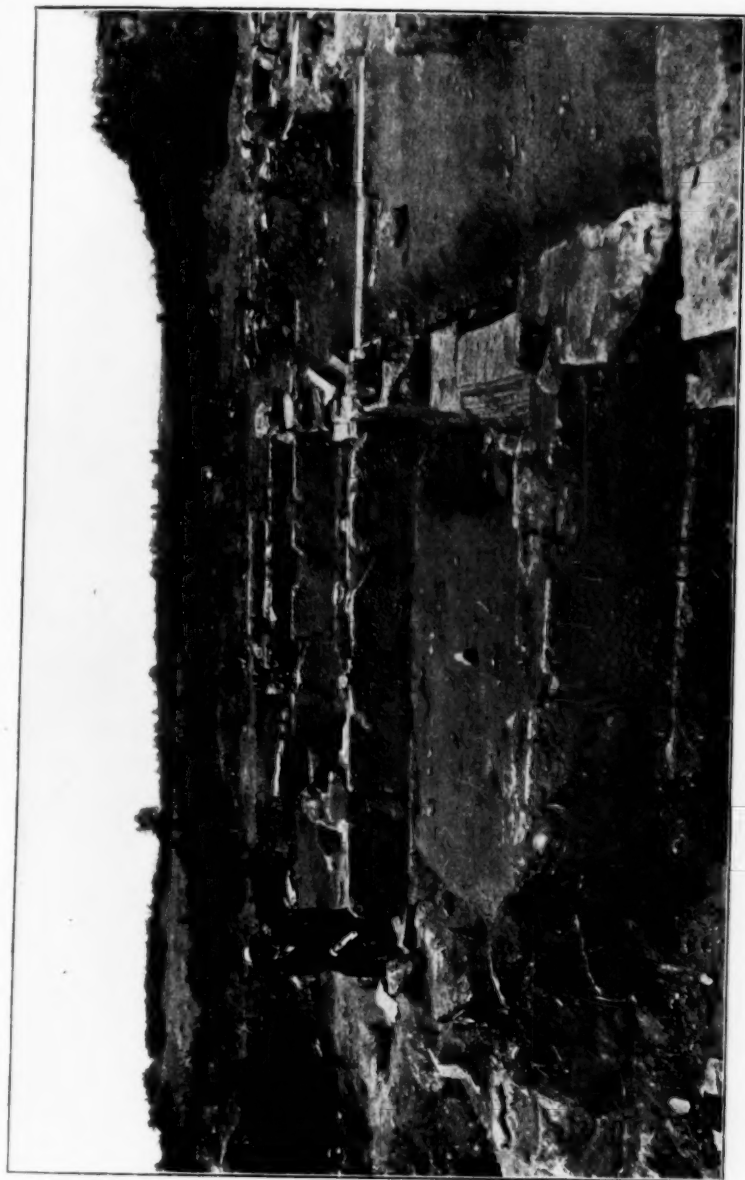
¹ Conze, *Melische Vasen*, pl. 2.

² Furtwängler, *Vasensammlung*, I, p. 47.

³ Böhlau, *Jahrbuch d. Inst.* 1887, pl. 4.

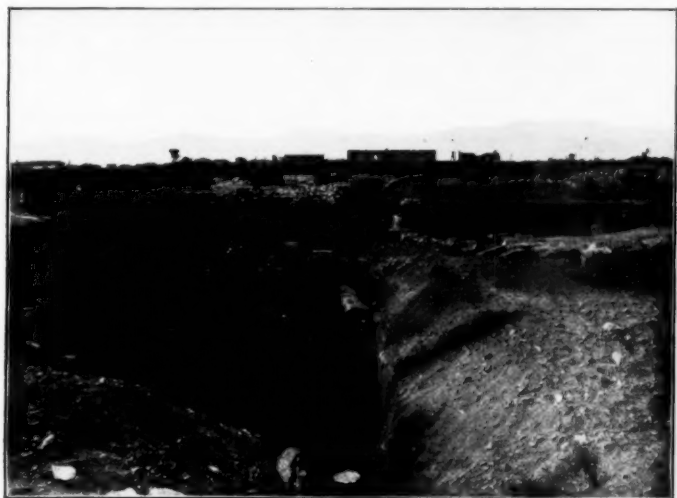


THEATRE AT ERETRIA, 1891: GENERAL VIEW OF STAGE BUILDINGS



THEATRE AT ERETRIA, 1891: TRACK OF EISKYLEMA





THEATRE AT ERETRIA, 1891

American School
of Classical Studies
at Athens

THE *EISKYKLEMA* IN THE ERETRIAN THEATRE

PLATES III-V

IN the course of the excavations at Eretria, which were conducted by the American School in the winter of 1891, while clearing the part of the stage-building that lies above the vaulted passage to the north of the oldest stage, I came upon an arrangement which has long remained a riddle.¹

North of the central door of the old *skene*, and at right angles to it, lay two parallel lines of slabs or plates of bluish marble (PLATES III-V, and Figures 1 and 2).² These lines of slabs lay almost directly above the outer walls of the vaulted passage, and at the southern end touched the sill a little inside the place for the door-jambs, slightly below the surface of the sill. On the west side the marble slabs were badly broken, and the earth which had sunk along that side at this point had thrown the pieces out of line. The slabs were still further disturbed by a couple of workmen, who had not heard

¹ *Am. Jour. Arch.*, First Series, VII, pp. 253 ff. and plan, pl. xi. For the account of the excavation of the wings and *paraskenia*, see *ibid.* X, pp. 338 ff., with pls. xviii and xix, and XI, pp. 317 ff., with pls. i-iii. These articles and plates are repeated in the *Papers of the American School of Classical Studies at Athens*, vol. VI, 1897, pp. 76 ff. and pl. iv; pp. 135 ff. and pls. xii-xv.

² To represent the marble slabs as they were found even with the ancient level, I have attempted (Fig. 1) to restore the ground floor of the stage-building, which is 3.66 m. higher than the orchestra. Whether the entire flank-chambers are later than the first enlargement of the *skene* does not concern us here, as the level remained the same after the second period: cf. *Am. Jour. Arch.* VII, p. 263 (*Papers*, etc., vol. VI, 1897, p. 86). By an error in my plans of 1891, *Am. Jour. Arch.*, First Series, VII, pl. xi (*Papers*, etc., vol. VI, pl. iv), the floor level of the old *skene* was placed as much above the later level as it should have been below the same.

my orders to leave all objects *in situ*. It appears, however, quite safe to restore them as on the other side, although it has not been possible to obtain accurate measurements here.¹

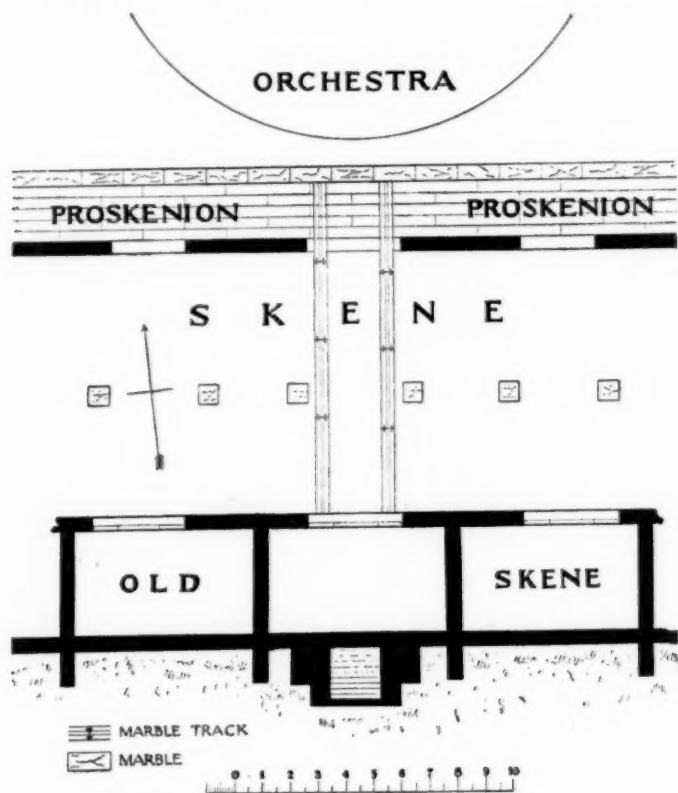


FIGURE 1. — *EISKYLEMA* IN THE ERETRIAN THEATRE.

The two lines were irregularly broken off before reaching the bases, and continued a little further on the west side than

¹ Photographs taken of this part of the building shortly after the marble slabs were discovered failed to develop sufficiently to be printed. The two photographs on PLATE V were taken by Mr. Gordon Oswald on the last day

on the east. It was evident that they had once gone further, as the last block on the west side was broken and the lost end had been carried away, while in the last block on the east side the swallow-tail clamp-holes clearly indicated that another plate had once joined it here. Another slab of the same length would bring us beyond the central bases, and if my theory of the use of these slabs is correct, these parallel lines of marble

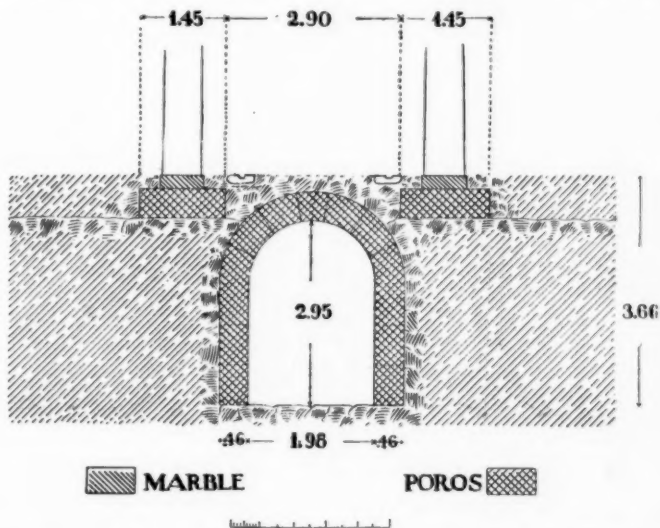


FIGURE 2. — VAULTED PASSAGE AND FOUNDATIONS FOR *EISKYKLEMA*.

plates originally must have extended to the *proskenen* front (see Fig. 1). Over the *proskenen* itself the track may have been of wood as well as the floor.

of the campaign, March 18, 1891; those on PLATES III and IV, and on Fig. 3, by Dr. Dörpfeld, May 5, 1891. The slabs do not appear on later photographs to my knowledge. The south end piece on the west side, which was thrown about by the men, I placed against the *scenae frons* east of vaulted passage, to be photographed and later brought to the local museum for safe keeping (see PLATE V).

On my visit in June, 1898, only the front end of the east line was found remaining.

The pressure of the earth behind precipitated the upper part of the *scenae frons*, and partly carried with it the objects above, and partly laid bare on a slanting line the masonry behind.

Now, when the plunderers came they had little difficulty in getting the marble and building materials from the front part, but, as they went further back, the objects on the ancient level

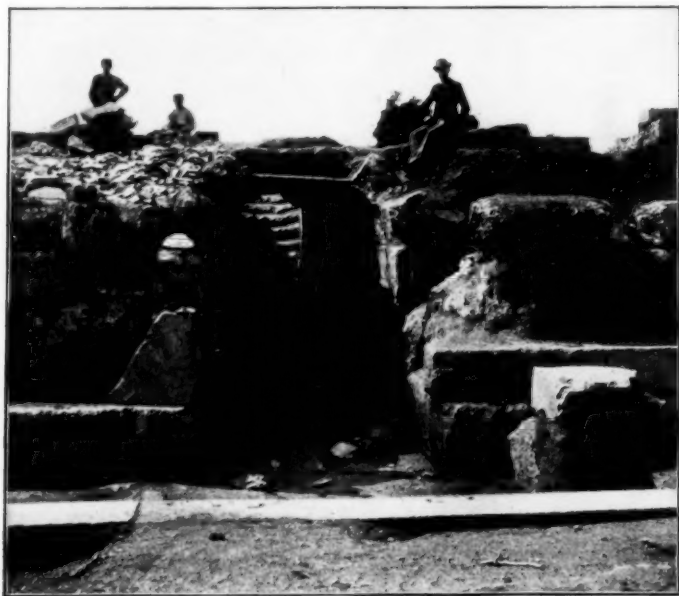


FIGURE 3. — VAULTED PASSAGE IN THE THEATRE AT ERETRIA.

were buried deeper, and baffled their attempts. This accounts for the better preservation of the remoter parts, while the front was largely stripped. Slabs that could not be got entire were broken and a part taken, as in the west line. On the east side, the last slab taken was wrenched loose, and carried with it the iron clamps that had held it to its neighbor.

The plates are 0.38 m. wide, and about 0.08 m. thick; they are carefully smoothed on top, a little rounded on the sides,

and somewhat rough underneath. The plates were firmly embedded in the hard-trodden ground, even with the ancient level. Along the middle runs a smooth and shallow groove 0.05 m. wide at the top, and 0.04 m. at the bottom, and 0.009 m. deep (see Fig. 2).

It requires time to harmonize all the facts of an excavation. Most of my attention was given, in the preparation of my report, to the fundamental questions, which were really more difficult than they seem after they have been generally accepted. Being, in 1891, uncertain whether these slabs were late or contemporaneous with the parts into which they were built, or what their relation to the rest was, I determined to omit the consideration of them from the Preliminary Report of 1891 in the hope that further excavation might throw some light upon this point. Nothing like this had been found before, and none of the visiting archaeologists could offer a satisfactory solution.

There are many reasons for abandoning the idea, which was suggested by some, that this is a late feature. In the first place, there is no trace or evidence that the building was occupied for any other purpose after it was disused as a theatre. Then the slabs lay in the ancient level, as is shown by the threshold and bases. The material and the workmanship are apparently the same as in the marble parts of the theatre. The abnormal distance between the middle bases can hardly be intended to minimize the pressure on the vault below, which is sufficiently massive to bear the weight, but must rather be attributed to a desire, for some reason, to get a wider space between the columns.

It first occurred to me that the grooves were intended to hold upright boards or the planks of partition-walls. In that case there would have been in the ceiling similar grooves, probably of wood. But it is difficult to see the object of dividing off a narrow corridor through the middle of the hall. At the same time, we should have expected that such partitions would have been placed in line with the columns on the bases in front. As the door-sill is 3.24 or possibly 3.38 m. long, and the proba-

ble distance between the columns about 3.60 m., a very slight widening would have brought the partitions into lines with the columns. Then grooves for the purpose of holding uprights are cut square and the sides and bottom left rough, while these have slanting sides and seem to have been worn smooth.

The front wall of the *skene* on the upper level is hopelessly gone, and we can only surmise the form and size of the opening upon the podium of the *proskenion*. The wide door-sill of the old *skene*, the still wider intercolumnium over the vaulted passage, the width between the parallel lines of marble plates (to say nothing of the stately doorway, if the *mediae valvae ornatus habeant aulae regiae*) indicate that the opening upon the *proskenion* must at least have been as large as the door of the old *skene*. Fortunately we are not left to conjecture altogether. In restoring the Greek theatre at Oropos, Dr. Dörpfeld finds a high and wide door in the corresponding place.¹ The architrave is not continued over the entrance, and bracket-shaped consoles support the running triglyph-frieze. Dr. Dörpfeld's restoration is undoubtedly correct, and it will be necessary to adopt a similar arrangement at Eretria, although we shall differ as to the purpose. The doorway was, as we have reason to believe, at least 3 m. wide, and to avoid appearing out of proportion in the most conspicuous place in the theatre, it was probably somewhat higher.

It will readily be seen that grooved marble plates in the form of ours, which are firmly fastened in the ground and bound to each other by iron clamps, could easily have done service as a track for a heavy car. This kind of rail, first of wood, and later protected by strips of iron, was used for a century and a half in the coal mines of England before the invention of the raised rail and the flanged wheel. In mines and street railways elsewhere it is still met with occasionally.² If it were not

¹ *Das Griechische Theater*, p. 108.

² Perhaps it was similar to an arrangement I noticed in the streets of Liverpool in the summer of 1808. The track is made with a groove along the middle and rolling surfaces on both sides, and, to correspond, the wheel has a flange between two tires.

for the ease with which it gathers dirt, this form would seem especially adapted to places requiring a level surface for other traffic. In the Greek theatre no form could better have suited the end in view. It was firm and smooth and offered no impediment, whereas a raised edge would be a serious inconvenience in acting.

In other theatres where the corresponding flooring was of wood the track also would have been of wood, and would have perished without leaving a trace behind. At Eretria we owe the fortunate preservation of this feature to the fact that the floor is of earth. If the *ekkyklema* belonged to the orchestra level, as is urged by Dörpfeld and others, there is no reason why traces of it should not have been found in the numerous theatres excavated up to date, especially as that level is rarely disturbed. But the track for it cannot be found *in situ* where it never existed. The supposition is further disproved by the lack of ample doorways on the lower level.¹

From the dramatists, as well as from the grammarians, we learn that there was a contrivance called *ekkyklema*. Pollux, after enumerating the different devices employed in the Greek theatre, goes on (IV. 128) καὶ τὸ μὲν ἐκκύκλημα ἐπὶ ξύλων ὑψηλὸν βάθρον, ᾧ ἐπικείται θρόνος· δείκνυσσι δὲ τὰ ὑπὸ σκηνῇ ἐν ταῖς οἰκίαις ἀπόρρητα πραχθέντα. καὶ τὸ ῥῆμα τοῦ ἔργου καλεῖται ἐκκυκλεῖν. ἐφ' οὗ δὲ εἰσάγεται τὸ ἐκκύκλημα, εἰσκύκλημα ὀνομάζεται· καὶ χρὴ τοῦτο νοεῖσθαι καθ' ἐκάστην θύραν, οἷον ἐκ καθ' ἐκάστην οἰκίαν: 'It was a high wooden structure or platform on wheels, used for exhibiting to the spectators scenes

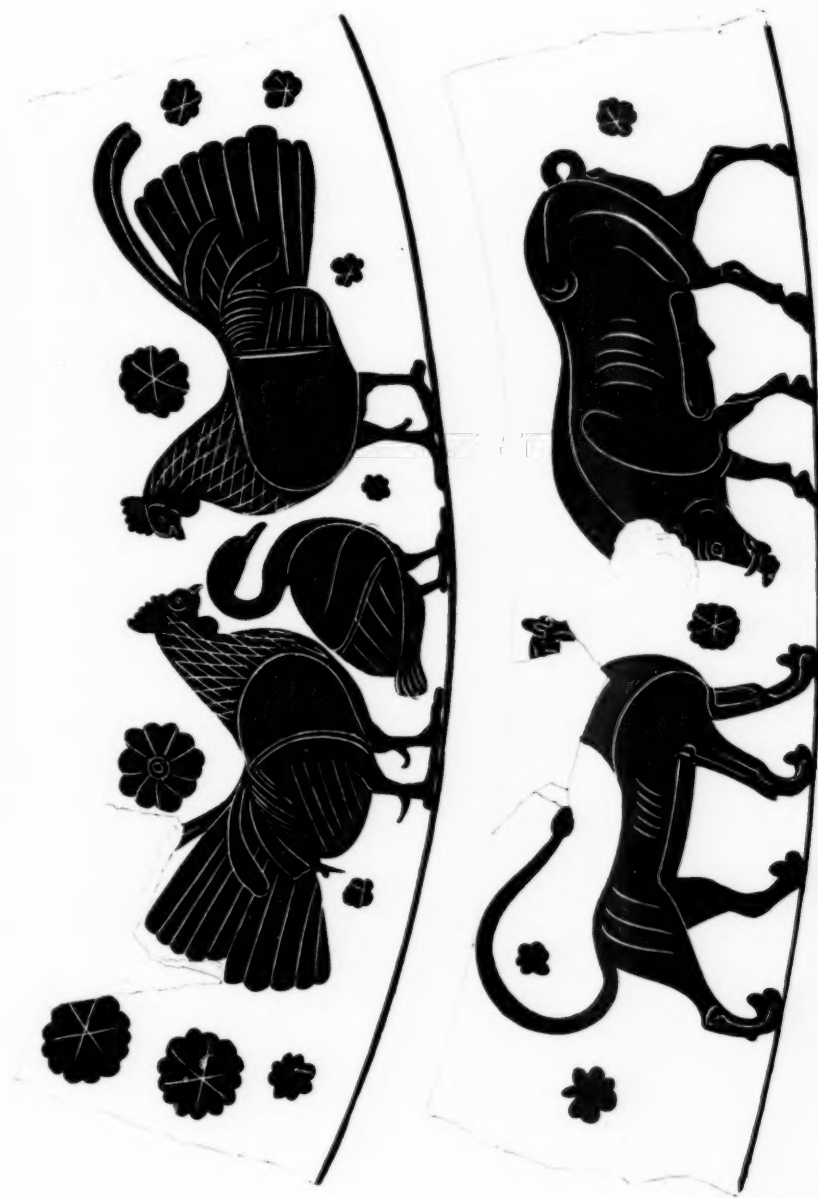
¹ Dr. Dörpfeld places upon the upper level the machine or crane used in bringing gods upon the scene (*θεὸς ἀπὸ μηχανῆς, etc.*); I would place here the *ekkyklema*. He explains his view, in a letter which I have received from him since this article was written, as follows: "Ihre Erklärung ist darin unzweifelhaft richtig, dass dort oben etwas gefahren worden ist. Nur glaube ich nicht dass es das Ekkyklema war, schon weil ich auf diese Maschine (mindestens für das V. Jahrh.) nicht glauben kann. Es gab damals nur eine Maschine, nämlich der *Krahn*, vermittelt dessen die Fliegenden erschienen. . . . Ich glaube dass die Vorrichtung in Eretria dazu diente, um Wagen in der Höhe erscheinen zu lassen. Die Götter erschienen oft oben über dem Proskenion auf Wagen und dass dazu Geleise notwendig oder wenigstens erwünscht waren, ist leicht einzusehen."

that had taken place within. *That upon which it moved was called eiskyklema.* We may have one at each of the three doors of the *skene* (as these, so to speak, represented the homes of the actors).’ In most cases, no doubt, it was sufficient to have one at the middle door, and it is perhaps no accident that the plays seem to bear out this view. But it is evident that it was necessary to have a track in order to bear the heavy weight and to direct the car to the desired position.

It must have been difficult to keep a smooth and hard surface on the earthen floor at Eretria. When heavily loaded the wheels would have cut into the ground and the car would have moved with difficulty. There would also have been danger of colliding with the door-posts or other objects in the neighborhood. At the same time it was important that the *ekkyklema* should move with the utmost ease and smoothness, without a jolt or jar, especially as the scenes in which it is said to have been used often exhibited characters in attitudes of repose. Therefore a grooved track on which it could roll safely and almost noiselessly would contribute to its success as a theatrical invention.

ANDREW FOSSUM.

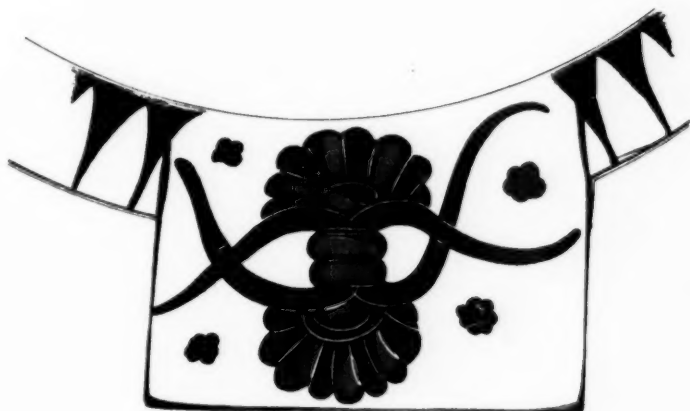
NORTHFIELD, MINN.

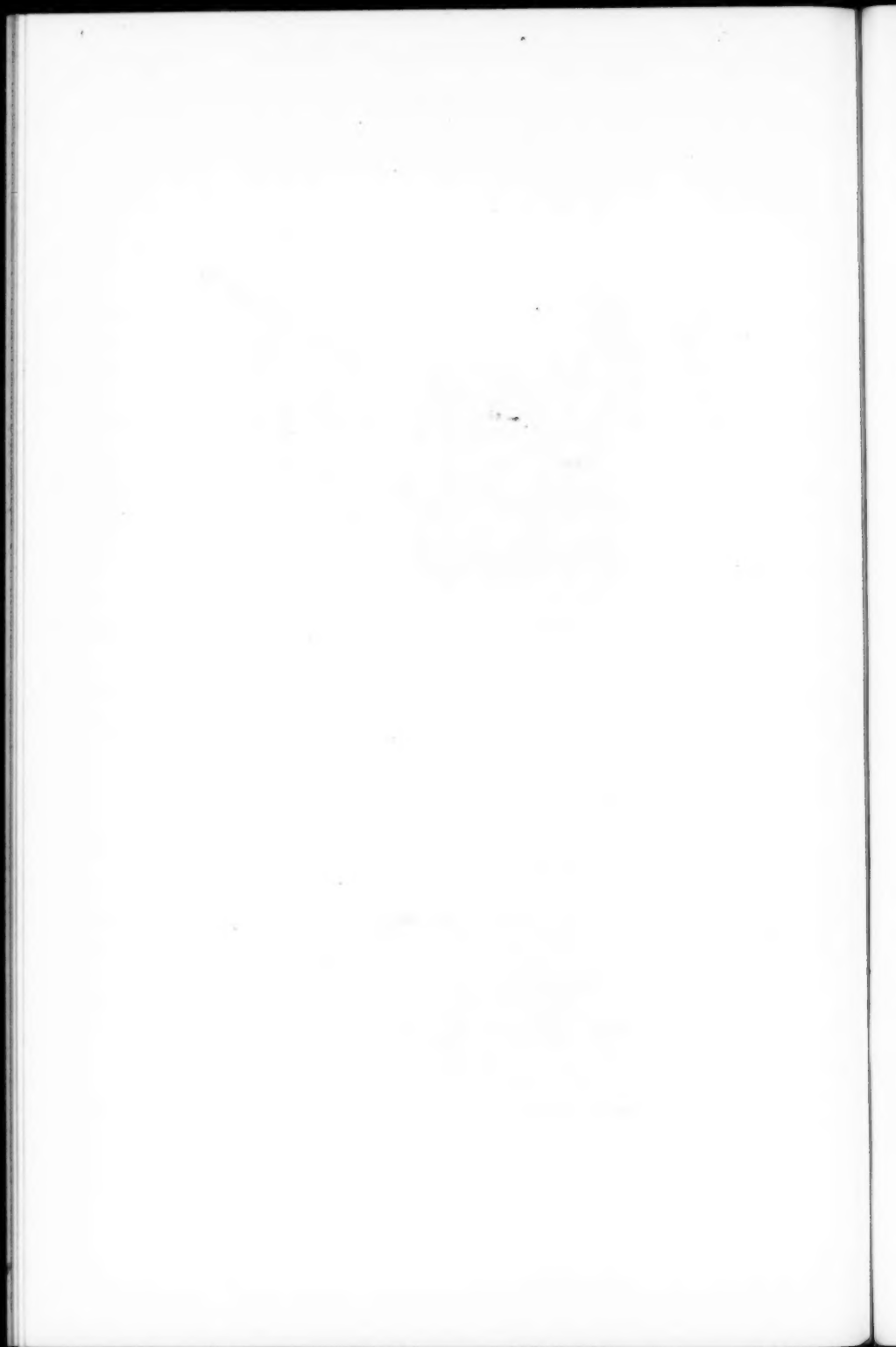


CELEBE FROM CORINTH

THE HILLETTER PRINTING CO. BOSTON







American School
of Classical Studies
at Athens

AN OLD CORINTHIAN VASE FROM CORINTH

[PLATES VI, VII]

IN one of the deepest of the trial trenches dug by the American School in the search for traces of Old Corinth in the spring of 1896 (Trench X on the Plan, — this *Journal*, Vol. I, 1897, Plate XIV), just north of the road leading westward from the Plane Tree square of the modern village, and within twenty feet of the square itself, was found the mouth of a well partly covered with massive blocks, at a depth of 6.50 m. below the level of the road. The cellar-holes of the houses destroyed by the earthquake of 1858 made here a depression of two or three metres, so that the above-mentioned depth was attained without more difficulty than the depth of 5 m. in several of our other trenches. That the well was old was evinced by the walls, evidently of Hellenic times, which lay above it.

The contents of the well were of unusual interest. Directly at the mouth of it we began to find fragments of Old Corinthian vases and no others. In going down into it 1 m. we collected several baskets full of these. But our progress was exceedingly difficult, since only one man could work in the limited space. Furthermore, water collected so rapidly here that we at last yielded to the difficulty and deferred the thorough emptying of the well to a time when, by cleaning away a larger space about it, we might make a more methodical approach. It is to be regretted that we did not reach the bottom of the well, even if it took all summer, for when the fragments already found were brought to the Athenian museum and washed, sorted, and pieced together as far as possible, the extent and

importance of our deficit was fully impressed upon us. A fair start was made in the building up of eight vases, the completion of which must be left to a later campaign. One vase, however, here reproduced from drawings by Gillieron (Fig. 1 and PLATES VI, VII), was nearly complete. This, put together out of forty-six pieces, lacks the foot altogether; two



FIGURE 1. — CELEBE FROM CORINTH.

large gaps appear on the body, one 0.31×0.04 m. and another 0.09×0.09 m., as well as several smaller gaps, one of which leaves a panther almost headless.

The vase is a *Celebe*¹ of the large kind found so frequently in Etruscan tombs; for example, the well-known vases containing

¹ Some German writers, e. g. Wilisch, *Altkorinthische Thonindustrie*, Tafel IV. 46, et al., classify vases of this form as *Amphore a Colonnnette*. But this

the Departure of Hector (*Monumenti*, 1855, Tav. XX), and the Departure of Amphiaraus (*Monumenti*, X, 4, 5). Without the foot it is 0.32 m. high; and with the foot it might reach a height of 0.40 m.¹ The diameter at the broadest part is 0.40 m., which, even with the liberal allowance for a foot, makes the usual proportions of diameter equal to or greater than the height.² The diameter of the mouth is 0.275 m., but the rim being 0.03 m. wide, the diameter measured from the outside edges of the rim is 0.335 m. This rim is broadened out in two places into handle-plates. From the outside edge of one handle-plate to the outside edge of the other the distance is 0.43 m. The breadth of the handle-plates including the rim is 0.08 m. Their length is in one case 0.115 m., in the other 0.117 m., their thickness 0.015 m. The length of the curved handle is 0.28 m., its diameter 0.02 m.

The clay, which is of a greenish-gray color, is not very carefully prepared. Several coarse grains of sand disturb the painted surface, and in the fresh breaks these are everywhere apparent. In both color and coarseness, then, the vase resembles the famous Corinthian *pinakes*.³ The walls are not by any means of uniform thickness; *e. g.* on the side containing the picture of the cocks a break near the bottom shows a thickness of 0.02 m., while at a point nearly opposite, the thickness is only 0.004 m. At a point under the cocks, and just above the rays, the thickness is 0.01 m., while at a point of equal height on the opposite side it is only 0.005 m. This whole lower part, then, shows one side from two to five times as thick as the other.

The inside is covered with a very dark brown paint, which term ought to be applied only to vases on which each handle consists of two upright *Colonne* joining the rim to the belly of the vase. In our vase the handle does not lose itself in the rim, but the rim rests upon and is joined to its upper curved portion. The difference though slight is important for accurate classification.

¹ The older the vase, the greater the likelihood of a rather high foot. In the restoration I have supplied a foot of the height of that of the Amphiaraus vase.

² See the list given in Wilisch, *op. cit.* p. 27, n. 107.

³ Furtwängler, *Vasensammlung* (Berlin), p. 48; Wilisch, *op. cit.* p. 33.

might almost be called black. Near the top it is carefully laid on, but lower down is much cracked, probably in consequence of being more carelessly done. On the outside we have the usual rays of dark brown running up from the foot on a field of the natural color of the clay. These rays, fourteen in number, 0.105 m. long, and 0.01 m. broad at the base, rise from a band of the same color which appears under the only two rays which are preserved in their whole length. Resting on the points of the rays comes a broad band of dark brown, covering the larger part of the surface. This on the side containing the cocks is much cracked, perhaps from exposure to fire. At the top it is bordered by a system of two bands of red or purple, each 0.005 m. wide, separated from the field by a brown stripe 0.003 m. wide, and from each other by a similar one 0.002 m. wide. This series of bands is certainly continuous, although it is difficult to trace under the cocks. Almost certainly another purple band, 0.01 m. in width, formed a similar border on the lower edge above the rays. Between these two borders the whole broad band is streaked. One might doubt whether there was originally a variety of colors here, were it not for the fact that on some of the fragments from similar vases found in the same place were narrow bands shading from red through brown to black.

On each side between the handles is reserved a field for the principal decoration. The space on the sides is 0.10 m. high, and the length is 0.38 m. on one side, on the other 0.365 m. The larger field, viz. the one with the boar, is lighter colored than the other, which has the greenish tint of the field of the rays at the bottom. Since this latter field also shows some variety, being darker under the field with cocks, it is not unreasonable to suppose that all the parts of the vase not covered with dark paint were left the natural color of the clay covered with a thin slip; and that the varied color of the different fields is due to the different action of the fire in the firing process. The upper surface of the rim is of the same light color as the concave side below, where the brush could not reach.

The whole upper part of the vase, which was thinner than the lower part, was more thoroughly affected by the firing.

On the longer of the two fields stand a boar and a panther, in that attitude of mutual nonchalance so characteristic of the Old Corinthian style. Equally characteristic is the panther with his face turned to the front. The boar, a massive animal, much larger than the panther, is a fine piece of painting. The incised lines are carefully drawn, although placed without any particular reason, especially on the fore legs. The applied red is also laid on without any obvious principle of distribution, but with great care to make a brilliant animal. In regard to the bristly spine we are left in some doubt; looking at the fore part of the animal we should suppose that everything above the long horizontal incised line was intended for this row of bristles, although marks of division are not given, as they are in the Calydonian Boar of the Dodwell vase, and on the Tarragon tripod (*Arch. Zeit.* 1881, Tafel iii), which is the usual practice. It is quite clear that in the small gap which contained the upper part of the head this row of bristles must have suddenly diminished, as in the vases cited. As we approach the haunches some curved transverse lines run quite to the top of the outline of the animal. From that point backwards all appears to be solid body. In this respect the boar differs, then, from the others just mentioned, where the line of bristles runs clear back to the tail.

The panther is not in any way different from ordinary Old Corinthian panthers. One might incline to the view that this field was the front or show side of the vase. The drawing is more careful than in the other field, and in accordance with this the rosettes are more sparingly applied, being only four, against ten in the other field. The field itself is somewhat larger.

In the other field are two cocks, and between them, not from any necessity of emphasizing the fact that they are not fighting, a goose, or a swan, smaller than the cocks. The spirit of the Old Corinthian style could not be better represented than in

two parade cocks in contrast to such fighting cocks as those on the reliefs from Xanthus (Brunn, *Denkmäler*, Tafel ciii) and on Athenian vases. Very similar to ours are the cocks on the Corinthian vase published in the *Sammlung Sabouroff*, Tafel xlvi.

But if there is no life, there is considerable variegation. The bodies of all three animals are covered, where the red color is absent, with incised lines, which on the necks of the cocks form a network. There is considerable divergence in the placing of these lines on the different cocks. The red color in this field is placed, according to nature, on the comb and wattles of the cocks, but otherwise on no rational principle, except that of enlivening the surface. A curious example of this are the seven little discs, or eyes, on the tail of the cock to the left, and two on that of the one to the right, as well as five on the neck of the goose. These spots resemble those on the tail feathers of the Hippalectryon in *Annali del Istituto*, 1874, Tav. F, given also in Harrison and Maccoll, *Vase Paintings*, plate viii. The cock to the left has two well-developed, sharp spurs, while the one to the right has only a stub of one spur.

The principal sign of greater carelessness in this field is the reckless manner of drawing the incised lines, which sometimes run off the bodies of the animals into the space around them as well as into the red coloring. The excess of rosettes has already been alluded to. Of the ten rosettes, the one over the left-hand cock is quite different from the others, having two consecutive, incised circles as a core, from which radiate nine lines, making a flower of nine petals; but the rim of the flower is scalloped into eleven petals, so that no great superiority in careful drawing can be claimed for this particular rosette. Of the others five are divided in the roughest way into six compartments, although the edge of the one over the right-hand cock shows eleven scallops, and the middle one, behind the tail of the left-hand cock, thirteen scallops. Three others are simply crossed by two lines in such a hasty way that it looks

as though the workman had struck at them hit or miss, and one has not been favored at all. It must be admitted that on the other field, also, one or two of the rosettes can hardly escape being called, like these, formless dabs of paint. It will not do to lay too much stress on the signs of carelessness in the cock field. It may have been in spite of this, when the color was fresh, about as showy as the other field. The cocks are, on the whole, distinguished by greater naturalness than the quadrupeds. Curtius ascribes the usual success in cocks to the fact that this animal did not come to Greece through the medium of Assyrian schematism (*Arch. Zeit.* 1878, p. 160).

The rim of the vase is ornamented with forty-eight rays, the bases resting on the inner circumference, and the points terminating in a very narrow band of dark paint, now mostly worn away. The handle-plates divide these rays unequally, twenty-three being on the side over the cocks and twenty-five on the other.

Each handle-plate, once bordered by a narrow strip of black, has a double palmette entangled in a trailing plant. It is far simpler and probably more archaic than the pattern in the *Sammlung Sabouroff* (*ibid.*), and, as there are no lotus blossoms, we can hardly call it a combination of palmette and lotus. The two ends of the palmette are not symmetrical, *e. g.* the one here reproduced in PLATE VII has nine leaves on its outer end and only eight on the inner end. The radiating lines are here also not in accord with the scalloping at the edge, and, as they are curved rather than straight, they cut right through the red color which is laid on the alternate leaves of the palmette. The other handle-plate lacks the rosettes altogether, and has, instead of the double band or cushion in the middle, only a single one.

But it is not on the score of its decoration that our vase demands attention. It contains no human figures which might be combined into a mythological scheme. It has no inscription, and so lacks the two principal features which have made the Old Corinthian vases, from the Dodwell vase down to the latest

discovery, such interesting objects of study. Even its ornamentation is so sparingly applied as to make it in this respect almost if not quite unique among its class, giving it perhaps an interest from this very lack. While we would not disparage the vase by denying that when its *parure* was all fresh upon it, it would have made, in spite of the superficial character of some of the work, a favorable impression, we must claim attention for it mainly on the score of its size and form.

As this may seem a strange claim to attention, I hasten to set the claim in its proper light by a quotation or two from authorities on ancient vases. Rayet et Collignon (*Histoire de la Céramique Grecque*, p. 72) have the following statement: "La plupart des vases de Caere et de Tarquinies se distinguent de ceux de Corinthe par leur dimensions plus considerable. . . . La forme la plus fréquente parmi les vases de style corinthien trouvés en Étrurie est celle de la kélébé." This is perhaps enough for my purpose; but lest it should fail, it may be reënforced by the following statement from the latest and fullest discussion of old Corinthian pottery (Wilisch, *Altcorinthische Thonindustrie*, p. 114): "Als auffällig muss Brunn zugegeben werden dass die in Italien so häufigen Colonnettamphoren sich in Korinth selbst gar nicht gefunden haben. Den Zufall hier für verantwortlich zu machen geht nicht wohl an; denn wenn auch die Gräber sicherlich uns wohl noch manche Ueberraschung bringen werden, so sind doch aus dem korinthischen Boden bereits so viele Vasen zu Tage gefördert worden, dass es überaus merkwürdig wäre, wenn von einer im alten Korinth selbst verbreiteten Gefässgattung noch kein Exemplar an das Licht getreten wäre. Es ist demnach kaum zu erwarten dass Vasen wie die caeretaner Amphoren mit Hektors Abschied und Amphiaros' Ausfahrt sich noch in Korinth finden werden."

Since our trial trenches which had for their object the discovery of a proper place to dig in the future, and were quite as likely to miss as to hit, have revealed not merely one large

Celebe, but remains of two others,¹ we may call for a revision of the statements as to the forms and sizes of vases found at Corinth. But this is not all. From the fact that we have a vase of undoubted provenience, we may give a substantial contribution to the discussion of the question of the origin of the vases found in the Etruscan tombs, a question which is not dead, even if it sleeps.

It is not so very many years ago that one heard the phrase "Etruscan Vases," as if Etruria and not Greece was the home of the ceramic art. And now, although it has long been recognized that many of the vases found in Etruria were made in Corinth and other parts of Greece, the prevailing view is that the greater part of them was made in Etruria.² This judgment may stand as the final result of scientific study, and yet Dümmler (*Röm. Mitt.* III, p. 180) characterizes the process of discriminating between the imported vases and those of local origin as one of the most difficult tasks connected with the history of vase-painting. A striking exemplification of this difficulty is seen in the case of Helbig, who, in the *Annali*, 1863, p. 210 ff., selected five vases from Caere as pseudo-Corinthian, and gave the characteristics which separated these from genuine Corinthian work; but in his book, *Das Homerische Epos* (2^{te} Auflage, p. 288), changed his view, because it seemed certain that one of these vases came from a tomb not later than the end of the sixth century, although Brunn (*Ausgrabungen der Certosa*) denied the early date of the grave, and defended the early view of Helbig against his later recantation.

¹ The handle-plate of one of these, which must have been of about the same size as the one here published, is reproduced on PLATE VII. In the place of the double palmette this handle-plate has a swan. The subject as well as the execution leaves little doubt that the vase of which this was a part was much superior to the one which we publish.

² Brunn, *Probleme in der Geschichte der Vasenmalerei*, § 14, says: "Lässt sich auch der positive Beweis noch nicht erbringen, so führen doch manche Anzeichen darauf hin, dass die gesamte Masse dieser pseudokorinthischen und athenischen Vasen nicht aus griechischen, sondern aus italischen Fabriken, wahrscheinlich aus Caere selbst, stammt, auf welchen Ort sie bisher fast ausnahmslos beschränkt erscheint."

In this difficult matter our vase must be reckoned with, not as giving evidence which settles the case, on the contrary perhaps as contributing to the difficulty; but it, at all events, removes from the discussion arguments based on the absence in Corinth itself of the large *Celebe*.

In still another way our vase gives assistance in discriminating between genuine and spurious Corinthian vases. Wilisch (*op. cit.* p. 116) states that Furtwängler sets down twenty-eight vases of Campanian provenience in the Berlin Antiquarium as Italo-Corinthian over against thirty-five genuine Corinthian vases from Nola, using among other criteria that of the "matte grüngaue Farbe des Thones"¹ in the former.

It would be extremely desirable to arrive at some date for our vase, in order to array it in the chronological series provisionally established for the noted Corinthian vases hitherto found (Wilisch, *op. cit.* p. 151 and 141, note 506). But as we have no inscription to guide us, we can only make some approximation to a date by following certain general considerations.

It is clear, in the first place, that the vase falls within the period when the Old Corinthian style was unshaken by the influences which put an end to it; and since the first great change was the introduction of black figures on reddish clay,

¹ This must refer to the separate classification of several vases in Furtwängler's Catalogue, section X, no. 1156 ff., although Furtwängler does not there give any criteria for the division. He mentions, to be sure, under several numbers of these "Italische von den Korinthischen abhängige oder ihnen verwandte Gefässe," the item of "grüngrauer Thon," "grünlich grau," "gelbgrau," and "grau." As our vase is of greenish-gray clay, it would invalidate the classification as far as it is based on that criterion. But this remark is directed rather at the statement of Wilisch than at the classification of Furtwängler, which is probably perfectly correct. But the oracle is dumb as to his criterion.

P. Arndt in *Studien zu Vasenkunde*, p. 151, declares: "der Thon der echt-korinthischen Gefässe ist heller, gelblicher, kräftiger geführt als der der italischen, welcher dunkler und weniger frisch erscheint. Dafür ist bei den letzteren mehr Nachdruck auf die Glasur gelegt." With admirable caution he adds: "Natürlich ist diese Beobachtung kein durchschlagendes Kriterium; in Griechenland wie in Italien wird man verschieden gefärbte Thonarten verwendet haben." Our vase amply justifies his caution.

in the first half of the sixth century (Wilisch, *op. cit.* p. 152), even if our vase is one born out of due time, it is still likely to be somewhat early in the sixth century, and in all probability goes back as far as 600 B.C. On the other hand, as a caution against putting it too early, we have an almost total absence of orientalism, which came in like a flood at the early stages of the Corinthian style. The animals, while purely Corinthian, have nothing fantastic or monstrous about them. In the amount, as well as the manner, of the ornamentation, there is great restraint, and this would seem to point to a later date, for instance, than the Dodwell vase. The absence of human figures must probably be ascribed to the taste of the painter, for this vase can hardly be put earlier than all the vases of the Corinthian style that contain such figures. If all other indications really pointed to an earlier date than 600 B.C., the presence of the two cocks would offer no serious objection to this chronology.¹

It would appear likely that our vase has seen usage. The inner edge of the rim is worn away all around, and the outer edge also has been so worn that the narrow black band spoken of above has nearly disappeared. Perhaps it was no mere show vase intended for a temple, but for utility. This might account, in part at least, for the sparseness of the decoration as compared with contemporary vases.

RUFUS B. RICHARDSON.

¹ Cf. L. Gurlitt, *Bemalte Marmorplatten in Athen (Hist. und Phil. Aufsätze Ernst Curtius gewidmet)*, p. 157: "In der That finden wir Hahn und Henne schon auf sehr alten korinthischen Gefässen, der Natur bis ins Kleinste getreu nachgebildet." Against the date of 550 B.C. proposed by Hehn, *Culturpflanzen und Haustierte*, 6^{te} Auflage, p. 323, as that of the appearance of the cock in Greece on his journey from India through Persia, is its appearance on the Chrysapha relief, which must be more than a century older.

American School
of Classical Studies
at Athens

TERRA-COTTA FIGURINES FROM CORINTH

DURING the excavations at Corinth in the spring of 1896 by the American School a considerable quantity of terra-cotta figurines was brought to light, notably in the theatre, and while the collection casually made in running trial trenches cannot be compared with the great yields of recent times at Athens, Olympia, Cyprus, Dodona, Delos, Coreyra, Tegea, Ptoön, to say nothing of the yield of graves in numerous other places, it still deserves to be inventoried. Most of the figurines are in a fragmentary condition, and hardly any of them can claim attention on the score of beauty. But, though humble representatives of a humble sphere of art, they are historically interesting, and it is not wholly unreasonable to claim for them a greater interest than that which usually attaches to such objects, on the score that they came from Corinth, a place of such renown that all which serves to throw light upon its art and its history has a value for that reason alone. While it will not be necessary, then, to enter upon any general discussion of the whole matter of technique in terra-cottas, the main points of interest can be given that are connected with the pieces discovered by us.

I. VERY ARCHAIC FIGURES

Figure 1. — Horse and Rider. Horse, 0.07 m. from nose to roots of tail. Rider, 0.035 m. high. There are forty-four other examples of about the same dimensions. Nearly all are of yellowish color without a trace of paint. But as one or two show traces of bright vermillion, and others of a pipe-clay

American Journal of Archaeology, Second Series. Journal of the
Archaeological Institute of America, Vol. II (1898), Nos. 3, 4.

coating, it is likely that most of them were once painted red over a thin slip, and that both paint and slip have now disappeared. In several the clay, both outside and inside, is red, a variation probably due to a difference in the firing. Owing to the small dimensions, the figures of both horse and man are solid. One horse has a different shape from the others, the body being remarkably short, allowing just room enough for the rider to sit. The riders are very rude, the face having but a single feature, the nose, which is made by pinching out a little of the clay. Above this a band of clay laid around the head makes a sort of turban. They have four little projections, each being a mere pinch of clay, serving as arms and legs, the arms being attached to the long neck, and the legs to the body of the horse. These are somewhat easily detached from the horse, and in that case one of them might readily be taken for a rudimentary quadruped. I had begun to classify a number of them as primitive idols, when it suddenly dawned upon me that they were dismounted cavalry. Twenty-five cases seem certain; several others are dubious. One shows a rudimentary helmet. One hundred and seven fragments of animals remain, some of which may be horses, but in no case showing the trace of the attached rider.

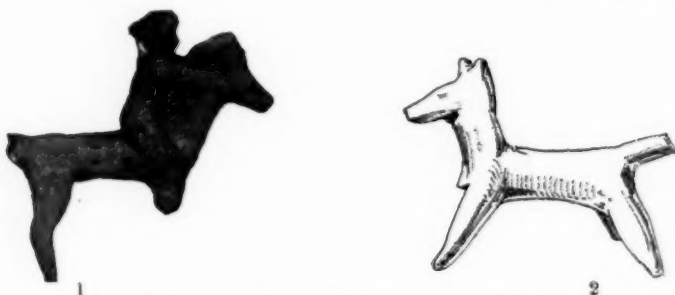
The provenience of all these equestrian figures was the Theatre (with one exception, which came from Trench VIII).¹ Perhaps we may attach some significance to this fact. Such figures, if not found in graves, generally point to the neighborhood of some temple, where they were *anathemata*, as in the great finds at Tegea (*Ath. Mitth.* IV, p. 168) and Coreyra (*B.C.H.* XV, pp. 1 ff.), or to the neighborhood of a terra-cotta factory, as at Tarsus (*Gaz. des Beaux Arts*, November, 1876). In the present case it would be easy, were it not for considerations which will come up later, to explain the mass of these figures as coming from the temple of Athena Chalinitis, mentioned by Pausanias as *πρὸς τῷ θεᾶτρῳ*. Although this epithet was applied to Athena at Corinth, with

¹ See this *Journal*, Vol. I, 1897, Plates XIV, XVIII.

especial reference to her bridling Pegasus for Bellerophon, it is not unlikely that it was first applied to her in a more general way, as the tamer of horses. Thus we might explain the presence in her temple of many an *anathema* of a horse and rider, with no hint of Pegasus about it.¹

Of the other animals, which are certainly not horses, a few may be mentioned in passing.

Figure 2. — From nose to roots of tail, 0.055 m. Perhaps a dog or a donkey. That there are fragments of dogs included in the lot seems almost certain from the rather fine hind part



FIGURES 1 AND 2. — ARCHAIC TERRA-COTTAS.

of one animal, especially the right hind leg (Fig. 3), showing much better anatomy than the hind legs of Fig. 1.

Figures 4, 5, 6, 7. — Height, 0.03 m. These appear to be heads of cows, although this can hardly be considered as certain. The strange piece wound about the horns may be some of the ornamental equipment for sacrifice, and so we have another indication that these figures came from an adjacent temple. Fig. 4, which was probably arrayed like the rest, has only ears. In Fig. 5 horns seem pretty clearly indicated.

¹ A horse and rider exactly like ours is given in the *Arch. Anzeiger*, 1889, p. 156 (in Dresden). Far more developed, though still very archaic, are horse and rider from Boeotia in *B.C.H.* 1890, pl. xiii; or in Heuzey, *Les Figurines Antiques de Terre Cuite du Musée du Louvre*, pl. 10, 3. A parallel to the human part of the combination is seen in several figures published by di Cesnola, *Cypriote Antiquities in the Metropolitan Museum of New York*, vol. II, pl. vii, and to the whole combination *ibid.* pl. lxxix, 638 and 641.

Fig. 6 seems to have both ears and horns, while in Fig. 7 the case is extremely doubtful.

Figure 8. — Height, 0.04 m. This might be the head of a dog (like Fig. 2) of the greyhound type, but it looks more



FIGURES 3-5. — ARCHAIC TERRA-COTTAS.

like a fox or some other wild animal. There are in our collection twenty-seven animals, of which the greater part are probably dogs. Besides a residuum of doubtful animals, we have a good number of birds, of which thirty-eight may be classified as doves (Fig. 9; length, 0.06 m.), although there



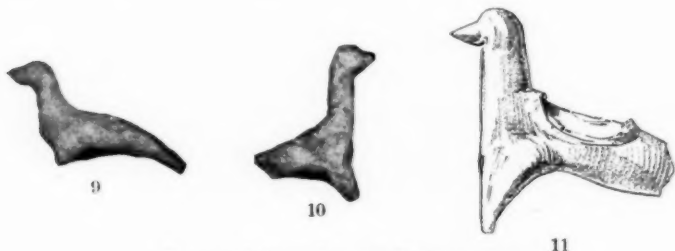
FIGURES 6-8. — ARCHAIC TERRA-COTTAS.

are others, resembling somewhat this one, which by the roundness of their body seem to be seals.

Figure 10, with long neck (height, 0.05 m.), can hardly be meant for a dove. It is more probably some aquatic bird. In Trench XVI was found a similar long-necked bronze bird on a round vase, like many figures from the Athenian Acropolis.

Figure 11. — Height, 0.047 m. Same as Fig. 10, except that it has marks of something formerly resting on its back; not a rider, unless one seated sidewise.

Figure 12 is one of three doves in the act of flying. This one, 0.05 m. long, has red stripes on tail and wings, and three little red spots on the back, laid on a gray clay.



FIGURES 9-11. — ARCHAIC TERRA-COTTAS.

Figure 13. — Height, 0.03 m. Here is represented a human figure, either with folded arms or, more probably, holding something, perhaps a loaf of bread, against his chest. The body is flat, and the head more formless, if possible, than that

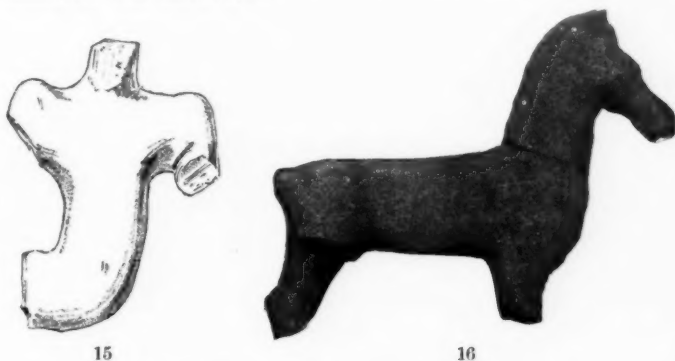


FIGURES 12-14. — ARCHAIC TERRA-COTTAS.

of the riders already mentioned. It resembles them in having the turban, but its face is like the beak of a bird.

Figure 14. — Height, 0.035 m. This is a flat breast, bearing a necklace or breast band fastened at the left shoulder by a great brooch. One at the right shoulder has doubtless been broken off. A similar breast was also found with one pendant on the necklace instead of three. The resemblance is close to

the figurine from Cyrene in Heuzey, *op. cit.* pl. 40, 1, and a Tanagra figurine, pl. 17, 4. This type is that of a very primitive idol, and the object itself is doubtless very old, although it was found in Trench I, where very little else of an archaic character was discovered.



FIGURES 15 AND 16. — TERRA-COTTA FIGURINES.

Figure 15. — Height, 0.065 m. The upper part of a human being joined to the lower part of some marine animal; perhaps a representation of some Corinthian sea divinity, as Melicertes.

II. LATER FIGURES

The objects hitherto mentioned are all distinctly archaic. In marked contrast are the following:

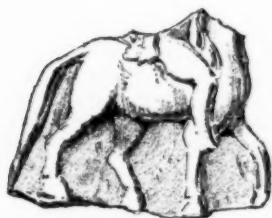
Figure 16. — Length from nose to roots of tail, 0.11 m. There can be no doubt that this figure is that of a horse; the rendering of it indeed is not without spirit. This was found in Trench XV at a depth of about five metres.

Figure 17. — Height, 0.045 m. Length, 0.06 m. Horse and rider in relief. The three examples of this kind are from the theatre, and they are so nearly alike, that they may be said to be from the same mould. Like the five following numbers they were made by pressing the clay into a shallow mould with the

fingers. The back is rough, as the pressure of the fingers left it, like most of the figurines from Coreyra (*B.C.H.* XV, 1891, pp. 12 ff.). These horses and riders are a great advance on those mentioned under Fig. 1, but they are still, like the preceding number, sufficiently archaic to derive their chief interest from this fact.

We now come to the chief objects of our inventory, a series of female figures in hieratic attitudes, standing, sitting, and reclining. These were all found in the theatre.

Figure 18. — Standing figure; height, 0.08 m. There are parts of sixty-eight other figures not all cast in the same mould,



17



18

FIGURES 17 AND 18. — LATER TERRA-COTTAS.

but at all events nearly identical. Sixteen have their heads preserved. The total height of these figures when intact must have been 0.11 or 0.12 m., but some are smaller. One, very well preserved except for the head, is considerably larger, about 0.14 m. high. The figures are fully draped with the *diploidion*, and standing very stiffly with the feet close together, just protruding from under the bottom of the chiton on a quadrangular base. The head carries the *polos* with a veil falling down at the back and sides. The right hand holding a bird, doubtless a dove, is brought up nearly to the level of the breast, and the left holding a round object, doubtless an apple, is brought also to the front, but a little lower down. Any one of the three

attributes, *polos* (Paus. II, 10, 5), dove, or apple, would be enough to indicate, especially at Corinth, that the person represented was Aphrodite; and a combination of all three makes the identification certain. Since, then, the same identification would follow probably for the seated and the reclining types, we have Aphrodite brooding over our theatre more heavily than over Euripides's literary and family life. Gratifying as it was to find so many riding figures as a token of the proximity of the temple of Athena Chalinitis, it is perplexing to find these figures of Aphrodite in such profusion in the same place, where no temple of Aphrodite is mentioned. Pausanias mentions only one temple of Aphrodite at Corinth, on the Acro-Corinthus, in which was an armed statue of Aphrodite (*ὠπλισμένη*, Paus. II, 4, 7). It is possible that these objects came from a temple of Aphrodite that was destroyed and not rebuilt at the refounding of the city, and so was unknown to Pausanias. It seems hardly probable that an armed Aphrodite was the type of goddess that held such noted sway in pleasure-loving Corinth. As the *coroplastes* was generally inspired by some great and noted work of art, it may be suspected that there were in Corinth noted cultus statues of Aphrodite standing and sitting, if not reclining.

But before passing to the two latter types, it is interesting to notice parallels to our standing type. The figure given in Heuzey, *op. cit.* pl. 18, 2, is not a parallel: it is identical. It was said to have been bought at Corinth, and for once we may now take the word of a dealer in antiquities. We have found the heap from which that waif found its way to the Louvre. The date assigned by Heuzey, the beginning of the fifth century B.C., accords well with the total impression of the mass. Parallel cases would be Heuzey, *op. cit.* pl. 12, 5, in which the apple is lacking and the dove shifted to the left hand; the Aphrodite of Lyons (Collignon, *Histoire de la Sculpture Grecque*, p. 190, fig. 90), which has the dove in the right hand as ours has, but nothing in the left. Cf. also *B.C.H.* XV, pp. 32, 36, and pl. 1, where each example repre-

sents a large class. No. 33, p. 46 *ibid.* was, before the attributes were broken away, an exact parallel, and it is interesting to find this coincidence of form in Corinth and Coreyra.

It is not now necessary to trace this figure from the Babylonian Astarte, although the line of descent is clear, and may be seen in the successive plates of a work like that of Heuzey, *op. cit.* Greek art at the beginning of the fifth century had so emancipated itself from oriental shackles that even a *coroplastes* had raised both hands from the side where they droop in the older examples, and given each of them a function. Heuzey,



19



20

FIGURES 19 AND 20. — LATER TERRA-COTTAS.

op. cit. pl. 18 *bis*, 1, is a replica of our figure, but, by substituting bow and stag, the *coroplastes* has made it into an Artemis as in so many of the Coreyean figurines (*B.C.H.* XV).

Figures 19 and 20. — Seated type. Height, 0.09 m. and 0.055 m. This includes, in all, thirteen examples. The right hand is always at the breast with a dove; the left is down on the lap. The head-dress is, as in the standing type, the *polos*. In some cases, where only the upper part of the body is preserved, it might be difficult to tell whether the figure is seated or not, were it not for the two knobs protruding from behind the shoulders and representing the back of the chair. This type is paralleled by several figures of Heuzey, *op. cit.* pl. 11 and 12.

Figure 21.—Reclining type, size 0.05×0.05 m. This class is represented by twenty-one examples. The *polos* is not so high in this figure as in the cases just mentioned, but if Fig. 22, as would seem probable from the right side protruding so far, belonged to the same type, the high *polos* was not lacking here also. This latter example, 0.04 m. high, has blue and red paint on the *polos* as well as a blue garment. One example is larger and has a higher couch. That the reclining figure is, in every case but one, a female seems pretty certain. That it is also Aphrodite and derived from the Babylonian Astarte there can be likewise little doubt.¹ Parallel examples appear in Heuzey, *op. cit.* pl. 3.

One feature applies to all these three classes of figures. They were once richly painted. In their present condition few show it: since when they are rubbed, except in the case of those that were badly worn at the time of discovery, along with the accretion of earth, various colors also are lost in the process of rubbing, and thus the only way of keeping the proof of color is in most cases to let it stay under the accretion.

We know enough to declare that these little *anathemata* once made a brilliant showing as they stood in rows in the temple of the luxurious goddess. As to details, the *polos* and flesh parts are most commonly seen to be red, which is also the favorite color for the garments. In one case, where no color appears elsewhere, because it is scoured off, two little vermilion shoes stick out from under the dress. Another shows a red band running across the breast and descending on each side of the chiton. It is difficult to define the use of blue with any certainty, but it is certainly present in spots, and probably made borders for red garments. In many cases it is difficult to say where the chiton begins. We find the breast bare, and a little lower down sure traces of drapery, but owing often to

¹ Cf. Heuzey, *Cat. des Fig. Art. du Louvre*, text, p. 45. Cf. Hdt. I, 181, 182. Kekulé, *Antike Terrakotten*, II (Sicilien), p. 13, fig. 19, with remarks *à propos* of a figurine from Selinus: "In mehreren Exemplaren vorhanden, Typus einer liegenden Figur welche fast ueberall mit allerlei Veränderungen vorkommt."

wearing away of the surface the line of transition is obliterated.

After the classification of all the fragments into the three classes, there remain thirty-two heads, of which it is impossible to predicate whether they belong to the standing, the sitting, or the reclining type.

There is nothing surprising in the preponderance of female forms in figurines, wherever found. Art in ancient Greece, as well as in the Middle Ages, was powerfully attracted by "das ewig Weibliche."¹

Figure 23. — Height, 0.04 m. This head of very red clay seems very long, owing to the coiffure. The part covered by the hair is half as high as the length of the face. The type of



FIGURES 21-23. — LATER TERRA-COTTAS.

face is uncertain. It is so different from a head of about the same size and same colored clay from Trench VII, of the regular Aphrodite type of Alexandrian or Graeco-Roman times (Fig. 23 a; height, 0.035 m.), that it must probably represent some mortal woman, perhaps of Roman times.

Figure 24. — Height from chin to top, 0.05 m. Dark red clay. This head has nothing particularly worthy of attention except in the way of contrast to the others. It has a most elaborate coiffure, four braids, each one larger than the one below it, encircling the forehead, with a transverse double band like a braid running up through them from the middle of the forehead, and two long braids running down each side. At the back of the head is a circlet of two thick cylindrical bands,

¹ See Pottier, *Statuettes de Terre cuite dans l'Antiquité*, pp. 38, 39.

perhaps withes, intertwined. There are also large earrings. The head is from Trench IX, where most of the other objects found were of Roman times, and this may also belong to the same period, although the face, in spite of its overloading with ornament, has considerable dignity, which reminds one of Hellenic work. The coiffure resembles somewhat that of the Hera in *La Nécropole de Myrina*, vol. II, pl. 28.

Figure 25. — Height, 0.04 m. This head of black clay bears a helmet, and on the strength of this I at first classified it as a man's head, but in view of the softness of the cheeks and chin, it must be put down as a female. The features are so muti-



FIGURES 24-26. — LATER TERRA-COTTAS.

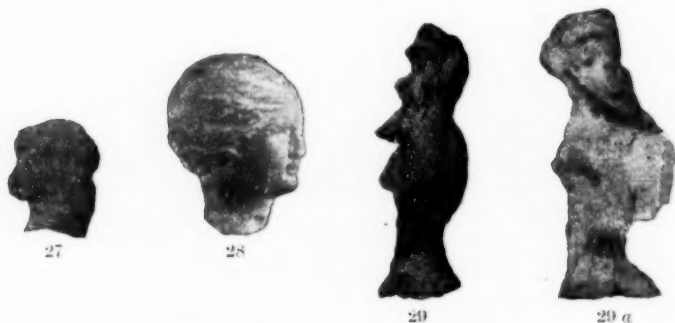
lated as to make accurate judgment difficult; but from the softness already spoken of, it can hardly be considered an Athena, an identification to which a helmet would naturally point. It is of course possible that a Corinthian *coroplastes* might give such softness to Athena, who comes to such honor on the coins of Corinth, but when we contrast it with Fig. 33, which represents Athena, we are half inclined to remember the Aphrodite *ὠπλισμένη*, already referred to, as explaining this type.

A considerable number of male figures and heads was also found.

Figure 26. — Height, 0.04 m. This head of dull red clay, with a beard shaped like a spade, and a diadem on the hair, seems to represent Zeus. The work is more sketchy than the

other male heads, the beard being produced by a series of perpendicular scratches irregularly interrupted.

Figure 27. — Height, 0.035 m. Black clay. A very fine head, reminding one of the heads of Asclepios or of Homer. It has a thick band encircling the head just above the forehead, the part in front being now broken off. A curious feature is the object, like a folded piece of cloth, falling down over the right ear. The other side probably had a similar flap, now lost. The lower end of the preserved flap curls up in such a way that the first view from the front makes one think of Zeus



FIGURES 27-29 a. — LATER TERRA-COTTAS.

Ammon with horns. It is the most kingly head of all that we found, and would do ample honor to Dionysus or Zeus.

Figure 28. — Height, 0.025 m. A small and delicate head, with fine features. The hair is plaited over the forehead, and above that is a garland. The head so surpasses the others in delicacy that one might be tempted to take it for a woman, but the coiffure is against that. The paint is quite well preserved, on the hair a chocolate color, and on the face yellow ochre.

Figure 29 and 29 a. — Height, 0.07 m. Red clay. A heavily bearded warrior bearing a shield on his left arm. The only feature of the face which he possesses is an enormous nose, although there are something like hollows where the eyes

should be. I should hesitate to call this a caricature. It is probably very archaic, and, though larger, represents the same rude essays at the human form as the rudimentary riders spoken of at the beginning. Much more elaborate, but similar in its general comical effect, is a head from Cyprus figured by Heuzey, *op. cit.* pl. 10, 4. Less elaborate is Cesnola, *op. cit.* pl. ix, fig. 68.

Figure 30. — Height, 0.045 m. Insignificant head with a conical cap, which reminds one of a similar cap on the Payne-



FIGURES 30-32. — LATER TERRA-COTTAS.

Knight bronze, *Jahrbuch des Instituts*, 1887, p. 13; cf. also pl. i. If one were searching for divinities in every case, one might compare this head with the Hermes Criophorus from Thespieae; Collignon, *Manual of Greek Archaeology* (Eng. Trans.), p. 247, fig. 76.

Figure 31. — Height, 0.09 m. Dull red clay. A satyr-like figure with leering goggle-eyed face, swollen belly, and large male organ indecently exposed. From the fact that this was found in the theatre, it may not unreasonably be supposed to represent a comic actor, like the figures given in *Nécropole de Myrina*, pl. 45.

Figure 32. — Height, 0.07 m. Chocolate colored clay. With this in Trench VII were found at the mouth of a perpendicular shaft, 3.5 m. below the surface of the soil, two other pieces of figurines of the same colored clay, one containing two slender legs on a round basis, and another the middle part of an ithyphallic figure. The first fragment may be a part of our figure, but the second cannot be, because its proportions are too large. We have here one of those grotesque figurines so common in Tanagra and elsewhere.¹ A flute-player with the stub end of a flute sticking in his mouth is blowing with distended cheeks, as if, like Marsyas, his skin depended on his powers of blowing. His conical cap contributes to the comic effect.

III. FIGURINE OF THE BEST PERIOD

Figures 33 and 33 a. — Height, 0.10 m. Brown clay. Found in Trench VIII, 4 m. below the surface. It is a pleasure to close this inventory with a piece of real merit. The warrior goddess, Athena, here stands before us in a form worthy of her reputation. She has a helmet with a visor resting upon what is probably meant for a thick band of hair, although it looks suspiciously like a cloth pad, and with a high point broken off just where it begins to curve forward. At the back of the head, joined on as a separate piece, is the lower end of the crest which once doubtless ran up over the point just mentioned, and, projecting forward, made the usual high-crested Attic helmet. The head seems to find its exact counterpart in the much smaller one from the temple of Athena Craneaia near Elateia (*B.C.H.* XI, pl. v, 8).

Our figure has an abnormally long neck. The right arm, now broken off, was raised, as is seen from the break, as well as from the greater height of the right shoulder in the front view. This arm probably held a spear. The attitude, however, is not one of attack but of calm self-control befitting the

¹ Collignon, *Manual of Greek Archaeology*, p. 259, fig. 82. Pottier, *op. cit.* p. 225; *Arch. Zeit.* 1863, Taf. 173; Baumeister, *Denkmäler*, p. 2112, fig. 2364.

Aeschylean sentiment, "All that the gods work is effortless and calm." Such may well have been the attitude of the great Athena Promachus at Athens. The face is crumbling somewhat, but enough of the features remain to warrant the belief that the maker of the statuette stood under the influence of the great masters, the contemporaries of Phidias. Unlike the figures of Aphrodite so abundantly represented in various



33



33 a

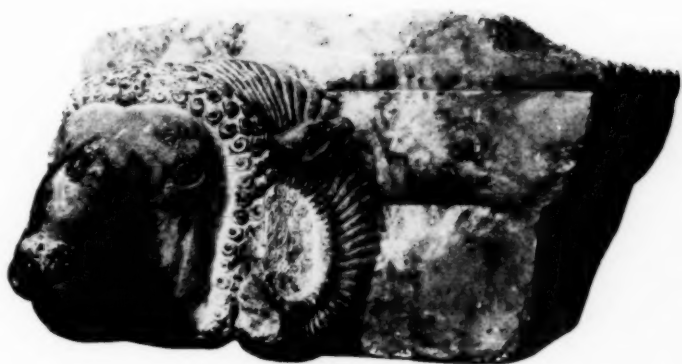
FIGURES 33 AND 33 a. — TERRA-COTTA OF THE BEST PERIOD.

types, this figurine was not cast in a mould which was to produce dozens of similar figures, but was in itself a work of art on which some skilful hand did its best work. It is contrasted with them as the figure in *B.C.H.* XV, pl. viii, 1¹ is contrasted with the bulk of the Corcyra figurines. Like the comical figure last described it is hollow, and shows a big aperture at the back, for the firing. Traces of paint appear all over the hel-

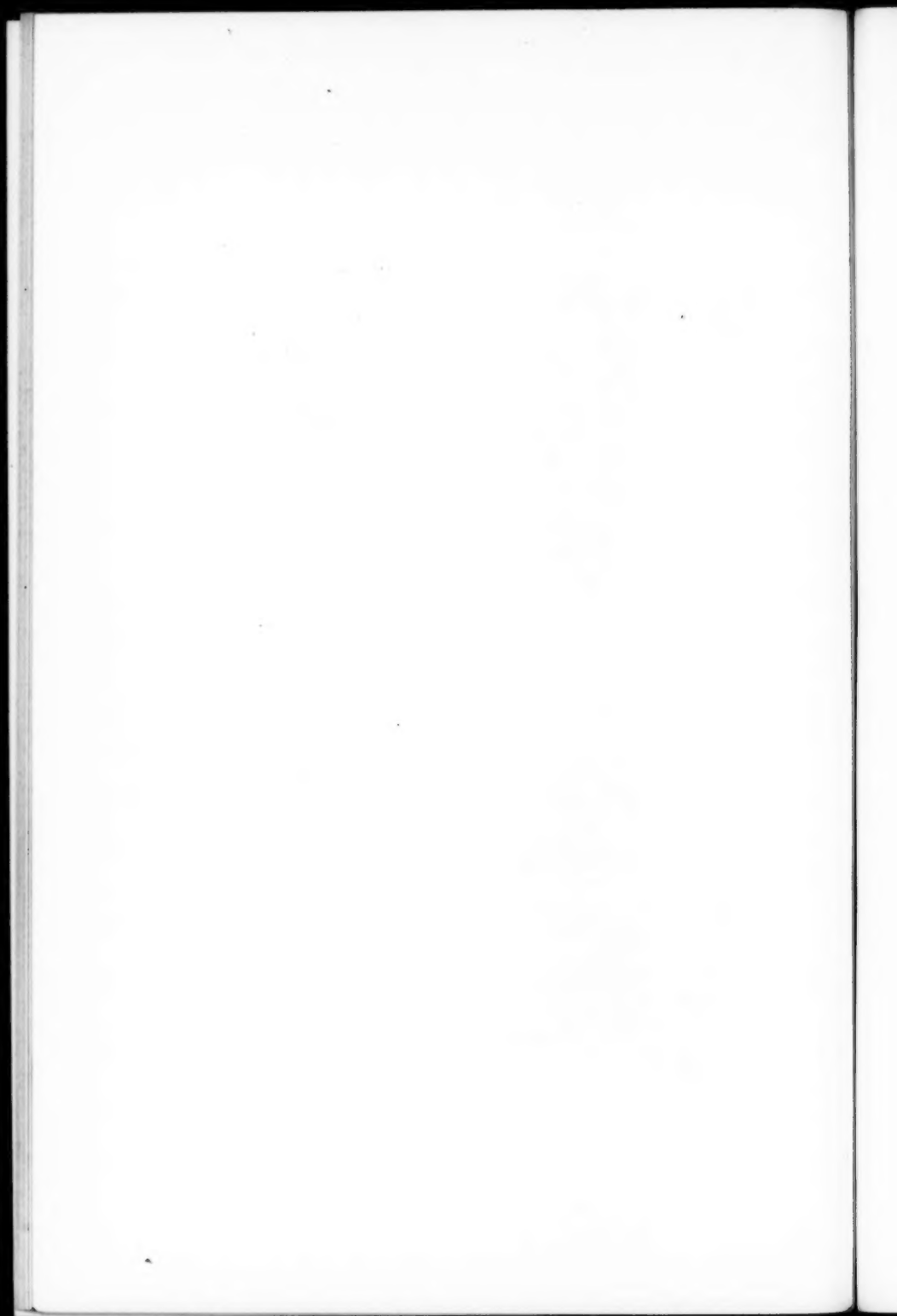
¹ See the remarks of Lechat, *ibid.* pp. 84-86.

met and dress, which is a chiton with *diplois*. How the blue and red were distributed it is difficult to tell. Red seems to fill the depressions which encircle the helmet, while blue covers the ridges. All that is certain is that the beauty of this dignified figure must have been much enhanced by its parure when it was fresh.

RUFUS B. RICHARDSON.



RAM'S HEAD FROM ELEUSIS



American School
of Classical Studies
at Athens

A TRACE OF EGYPT AT ELEUSIS

[PLATE VIII]

IN the National Museum at Athens there is one piece of sculpture, the ram's head from Eleusis,¹ that has not attracted the attention it deserves. Both on account of its intrinsic excellence, and on account of certain deductions which may be drawn from it, we are justified in discussing it at some length.

It was found in the excavations of 1883, in front of the middle of Philon's Porch, at a depth of 2.50 m.² It is clear from the description of the circumstances of its discovery, which emphasizes traces of fire and the pre-Phidian character of the fragments of sculpture here brought to light, that the excavators were in the "Perserschutt," though they had not yet learned to know it by that name. The "Persian fury" fell upon Eleusis as well as upon Athens, and figures like the Acropolis maidens were found in these excavations in the same battered condition as their more famous sisters.³

There is no difficulty in fixing the date of this ram's head within certain narrow limits. The head projects from a block which was the corner-piece⁴ of the cornice of a building. The block shows on its right side the beginning of the ascending

¹ Kabbadias, *Catalogue*, no. 58.

² Πρακτικά, 1883, pp. 60-63.

³ *E. g.*, Kabbadias, *Catalogue*, nos. 24-26, and 'Εφ. Αρχ. 1884, pl. viii.

⁴ Its position on the building is illustrated by restorations of the temple of Aegina: Durm, *Baukunst der Griechen*, 2^{te} Auflage, p. 155, fig. 119; and *Expédition Scientifique de Morée*, vol. III, pl. lvi; and of the temple of Bassae, *op. cit.* vol. II, pl. xxvi. Its dimensions are: length, 0.56 m. (at the top); depth, 0.52 m.; height, 0.32 m. The profile of the face extends along the whole right side.

line of the oblique cornice of the gable, with a very low pitch of about 1:5. What the building was is as good as certain. The block is of island marble, as are the roof tiles found in considerable quantity in and around the great temple, and it bears traces of fire. Island marble had its day in Attica in the time of Pisistratus. Tiles and cornice-block alike belong to the temple of Pisistratus, the columns of which have been discerned amid the ruins of the later temple.¹

The upper surface of the block is left rough, which does not imply that it was never put in place, for the face is not only carefully wrought, but painted. Perhaps it was never intended to put a corner *acroterion* upon it. A temple need not have such ornaments to pass as finished; and if it were desired at any time to add them, the smoothing-off could be done for the occasion. It is a curious feature of the block that the convex moulding, 0.10 m. broad, stops at the left of the head, 0.04 m. short of the edge. No certain pattern can be made out of the traces of paint, although something like a painted leaf is pretty certain, marked, not by remaining paint, but by different preservation of the surface of the marble. It is said by those who saw the block ten years ago at Eleusis that the paint was then quite conspicuous. The head is not a gargoyle, in the proper sense of the word, but a solid architectural ornament.² It has some clear testimony to give as to its own date. The band of hair around the forehead, extending downward in front of the horns, and the hair covering the throat are made up of just such locks as compose the hair of the Harmodius head in the group of Naples Tyrannicides and of the archaic Ludovisi head (Brunn-Bruckmann, no. 223); viz. flat, snail-shell ring-

¹ That there was any other temple of Demeter at Eleusis besides the great building generally known as the Telesterion or Initiation Hall is uncertain. Certainly the foundations on the hill above it, which Blavette, *B.C.H.* 1884, p. 262, took to be the ruins of a very old Demeter temple, belong to Roman times. Cf. Rubensohn, *Die Mysterienheiligtümer in Eleusis und Samothrake*, p. 112; Phillos, *Eleusis, ses mystères, ses ruines, et son musée*, p. 65.

² Dimensions: length from the face of the block to the break at the tip of the nose, 0.40 m.; breadth at the junction with the block, 0.31 m.

lets, as we may call them, in distinction from the corkscrew curls of the so-called Antenor figure of the Acropolis and the male head in the British Museum, published in *B.C.H.* 1893, pls. xii and xiii. There are very marked tear-ducts, 0.03 m. long, extending downward in a curve from the inner corner of each eye, a feature paralleled in the archaic horse in front of the Acropolis Museum,¹ which Winter² makes contemporary with the Rampin head, and so with the bloom of the Chian period.³

The peculiarity of the hair, according to Graef,⁴ shows such an advance in style over the corkscrew curls as to point to a later date. This consideration would put our head rather late in the pre-Persian period, and of course in speaking of the Telesterion of Pisistratus one does not imply that it was completed before his death or before the fall of his sons, any more than one claims the same for the old Athene temple on the Acropolis.⁵

The peculiarity of the tear-duct, however, draws us backward in time, and it seems advisable to place the ram's head somewhere near the horse which has been fixed by Winter's careful study of the series of archaic horses from the Acropolis.

Besides the curls already described, the triangle at the top of the head between the horns is filled with round knobs which the sculptor did not elaborate into curls, perhaps because they could not be seen when the block was in position. Within the circle on the cheek formed by the horns the same knobs appear in the upper half, while the lower half, which could not be seen from below, was left rough.

The curls across the forehead and down the side of the head contain in their hollows much blue paint, which shows no sign of turning to green, as seems to have been the case with so much of the blue on the Acropolis sculpture. The locks under

¹ *Jahrbuch des deutschen Inst.* 1893, fig. 9, p. 139.

² *Ibid.* p. 148.

³ A stag recently found at Delphi shows a somewhat similar tear-duct.

⁴ *Ath. Mitth.* 1890, p. 2.

⁵ Cf. Schrader. *Ath. Mitth.* 1897, p. 112.

the neck are wrought as carefully as the others, but show no trace of paint. If it was ever applied, it may have been washed away by the block being turned upside down for a long time.

A ram with blue wool perhaps needed no apology to a generation which had always had the blue bulls of poros sculpture before its eyes. But if any one did call the sculptor to account, could he not say that he was representing the ram of Ulysses with his dark violet wool?¹

But lest any one should think that it is wasting words to discuss the style of a sheep's head, as if it were a human head, I may as well declare that this head seems to me to bear the palm in archaic animal sculpture, as the bronze ram in the museum at Palermo² bears the palm in animal sculpture in the times of fully developed art. Even the best of the Acropolis horses do not approach it in exquisite finish. Such terms as "fini de l'exécution," "délicatesse," "caressé," which Lechat³ is so fond of applying to his favorite Acropolis maiden, are not out of place here.

It is of course unfortunate for the total effect that the tip of the nose, like so many other noses of gods and men, is broken off. It is less damaging that the tips of the horns also, being most exposed, were broken off as a matter of course, perhaps in a fall from a high place. But after all not much is lost. A good part of the nostrils filled with red paint is still preserved, and from that point upward we have the face of a fine old bell-wether: first, a rising, swelling, expanding nose — a regular hillock of bone, emphasizing the essential difference between the head of the ram and that of the ewe. Then come the parts about the eyes worked with extreme care and showing delicate curvatures. The black paint of the eyeballs is well preserved. The horns form an unsurpassed piece of realism. All the striations, with their obliquities and curves, could not be more true in a petrified ram. It is just beyond the point where

¹ Hom. *Od.* i 426, ἰοδνεφέες εἰρος. Cf. δ 135.

² *Arch. Zeit.* 1871, pl. 25.

³ *B.C.H.* 1890, pp. 121-132.

the striations cease, and the plain tips begin, that the horns are broken off.

When one considers that this was only an architectural ornament in which we expect something merely schematic, *Dutzendarbeit*, and placed so high that none of this detail could be appreciated, we seem to see a waste of care. But this sculptor was evidently bent on finishing his work *ad unguem*, whether it was to receive the meed of admiration or not.

It is, however, not merely to praise the execution of the head that I here take the opportunity of publishing it, but to express surprise that no one has shouted out over it the word "Egyptian," as did Bérard over his seated figure found at the so-called temple of Demeter near Tegea.¹

More than half a century has elapsed since savants like Creuzer and Thiersch were willing to take Diodorus Siculus² at his word and consider Erectheus an Egyptian who became king of Attica and introduced the Eleusinian mysteries from Egypt. In that interval all that Herodotus says about the derivation of the Greek gods from Egypt, and in particular what he says about the worship of Demeter being introduced into Greece through Argos by the daughters of Danaus,³ has been thrown overboard. Otfried Müller came and with his keen logic cut away the curtain on which Herodotus and his lineal descendants had painted the beginnings of history, and men saw the past in clearer perspective. Then arose a science of Egyptology, and for the last twenty-five years one has hardly dared to pronounce the words Eleusis and Egypt together for fear of the Egyptologists. So, in 1895, when the Greek excavators at Eleusis found, in a grave containing vases of the very oldest class, some scarabs and a statuette of Isis, they said very little about it. Philios, in his Guide to Eleusis,⁴ even goes out of his way to declare that the resemblance in form of the Telesterion to the hypostyle halls of Egypt is no proof that the cult of Eleusinian Demeter had its origin in Egypt.

¹ *B.C.H.* 1890, p. 382.

² *Diod. Sic.* I, 29.

³ *Herod.* II, 171.

⁴ *Eleusis, ses mystères, ses ruines, et son musée*, p. 70.

But without exactly shouting the word "Egyptian" over this ram's head, we may boldly call attention to its claims as a token of Egyptian influence at Eleusis. In the first place it is significant that, whereas lions' heads are universally used in Greece as gargoyles and architectural ornaments,¹ we find here at Eleusis a ram's head in their place. It will be allowed without discussion that the ram holds a conspicuous place in Egypt. Witness the long rows of ram sphinxes at Luxor; the ram-headed gods Ammon, Ra, and Knumu;² and the rams' heads on the *bari* or sacred book of the dead.³

A corroboration of the correctness of our derivation of this ram's head from Egypt, and perhaps more than a corroboration, a proof even, to one who might regard the numerous appearances of the ram in Egypt as inadequate proof, is a vase of the *Sabouroff Collection* (pl. lxx) in the form of a ram's head, a product of Attic ceramic art. The *penchant* of vase-makers for copying noted pieces of sculpture is well known. If now a potter had wished to reproduce our ram's head, it is difficult to see how he could have done it more accurately. The ram's face on the vase has the same great bulge. The almost unique tear-duct is faithfully reproduced. On such a small scale one would hardly expect incised lines to convert the little knobs representing the locks around the forehead and cheeks into the snail-shell forms of the sculptured head.

The vase bears a tell-tale inscription, scratched upon it at a time not much after the making, which Furtwängler (*op. cit.*) puts as rather before than after the middle of the fifth century. The inscription runs 'Ελεφαντίδος εἰμι ἱερός. Elephantis is a variant for Elephantine, and as there is no such divinity known as Elephantis, it appears that the Attic potter, or the dedicator, if he was a different person, took the name of the place for that of a divinity. Since Knumu, the ram-headed god, was

¹ Durm, *Baukunst der Griechen*, 2^e Auflage, p. 137, speaks even of the lions' heads in architecture as derived from Egypt.

² Maspero, *Histoire Ancienne*, p. 239 (Relief at Elephantine).

³ Perrot et Chipiez, *Histoire de l'Art dans l'Antiquité*, I, pl. ii (Walls at Karnak), and fig. 209, p. 359 (at Elephantine).

the great divinity at Elephantine,¹ we may understand the inscription as spoken by the ram-headed vase itself as a figure at Argos might say, *τὰς Ἡρας εἰμὶ ἰαρός*. The vase is attached to Egypt by its inscription, and by its form to Eleusis, and thus it links the two together.

The vase must have been made at least twenty years, and probably more than fifty years, after the head. If the Telesterion of Pisistratus was destroyed by the Persians, the head would in all probability have been under ground nearly twenty years before the vase was made. In that case we should have to suppose some common link now lost. Two rams' heads appear on a marble cornice-block in the second Acropolis museum, belonging to the old Athene temple. One is certainly a gargoyle. Both are broken off so close to the block that one might think them replicas of the head in question. But Theodor Wiegand, who is making a study of the ancient temples on the Acropolis, tells me that still in his judgment they are somewhat more archaic.

It is, however, at least possible that the head was above ground long enough to serve as a model for the potter. The Persians burned the Telesterion of Pisistratus;² but there is no reason to suppose that they tore it down any more than they did the old temple of Athene on the Acropolis. The destruction is, indeed, likely to have been less thorough at Eleusis than at Athens, which was the especial object of Persian vengeance. When the so-called Cimonian Telesterion was built the old one, of course, had to be removed. But "Cimonian" is only a convenient term to designate what came between Pisistratus and Pericles. A provisional restoration, not more difficult,

¹ At a time when Greeks were familiar enough with Lower Egypt, the knowledge of Elephantine, on the remotest bounds of the land, would probably come to an Athenian potter, if it came at all, in about the form in which adventurers like those who cut their names at Abu Symbel, a century and a half before, were likely to bring it. It is surprising to find so early a vase of an animal form which subsequently became so popular in *rhyta*. It is also difficult to find an occasion for a dedicatory offering like this in Greece.

² Herod. IX, 65.

perhaps, than that which must have followed upon the ravages of Cleomenes, may have served for the home of the mysteries for twenty years, before the rebuilding energy spread from Athens to Eleusis; and this would bring the temple down to about the time of the vase.

This head, then, is our earliest monumental evidence of Egyptian influence upon Greece, and it brings Egypt and Eleusis together in a very different way from that proposed by Diodorus and Creuzer; but in a way which gives substantially what they claimed, putting it, however, at a different time, and taking account of the perspective established by sober, historical research. Instead of the bald, dead equation, Demeter = Isis, we have proof of a stream of influence which, beginning as far back as Psammetichus, flowed into Greece from the older civilization. In one respect, at least, it seems to have been a life-giving stream, and not like the corrupting current which flowed from the Orontes into the Tiber. That this influence was felt, especially at Eleusis, cannot be doubted when we see it in operation, as it is described by Wilamowitz (*Homerische Untersuchungen*, p. 208). He claims that the element which gave the worship of Demeter at Eleusis its importance—the doctrine of personal immortality that had brooded over Egypt for ages—was not known at Eleusis, even in the time of the composition of the Homeric Hymn to Demeter.¹ But shortly afterwards it was welcomed by thousands, and among them the best men of Greece. When Cicero praised the mysteries, partly, perhaps, because he wished to be in line with the Greek writers, they had become largely an empty form or a superstition. But to Pindar they were a sacrament. Wilamowitz does not ascribe the new revelation to Egypt. But if, at the very time when Egypt is seen drawing near to Greece, the doctrine of individual

¹ This, of course, implies the rejection of the passage 474–483, which, indeed, has been rejected by critics, on the ground that it is clearly an ending which breaks the force of the ending that follows immediately afterwards. Baumeister (*Hymni Homericæ*, p. 280) boldly puts the whole hymn in the age of Pisistratus, when the doctrine of immortality is, of course, fitting.

immortality appears as a living force, why not recognize the source?

We have learned in the last two decades a good deal about the age of Pisistratus and about the enlightened tyrant himself, living in an atmosphere of art, poetry, and religion. We seem to know him almost as well as we know Pericles. We may proceed to conjectures about him, and suppose that he who did so much for Athena and Dionysus is likely to have borne Demeter also in mind. One may take liberties with a writer like Apollodorus, and we may amend his statement (III, 14, 7), that in the reign of Pandion, Demeter and Dionysus came to Attica, and say that in the deepest and truest sense Demeter and Dionysus came to Attica in the reign of Pisistratus. While it would be rash to suppose that the man who cared so much for Homeric poetry as well as contemporary poetry must needs have been "learned in all the wisdom of the Egyptians," there is yet no man better qualified than he to have given that transformation to the worship of Demeter which made it the great ethical force in the ancient world.

Of course, in spite of the fact that Homer hardly seems to know of Demeter, her worship does extend back into the remote past of Greece, and there was that in it which made it easy to graft upon it the high ethics and the discipline of sorrow which is incorporated in the face of the Demeter of Cnidus. The goddess of agriculture,

"Die herein von den Gefilden
Zog den ungesell'gen Wilden"

and accustomed him to law and order, might be better fitted to act as the keeper of the keys which opened the door unto eternal life than great Zeus himself. The seed which seemed to die, but which sprung up in abounding life, suggested that there might be another chance for the man who goes down into the earth.

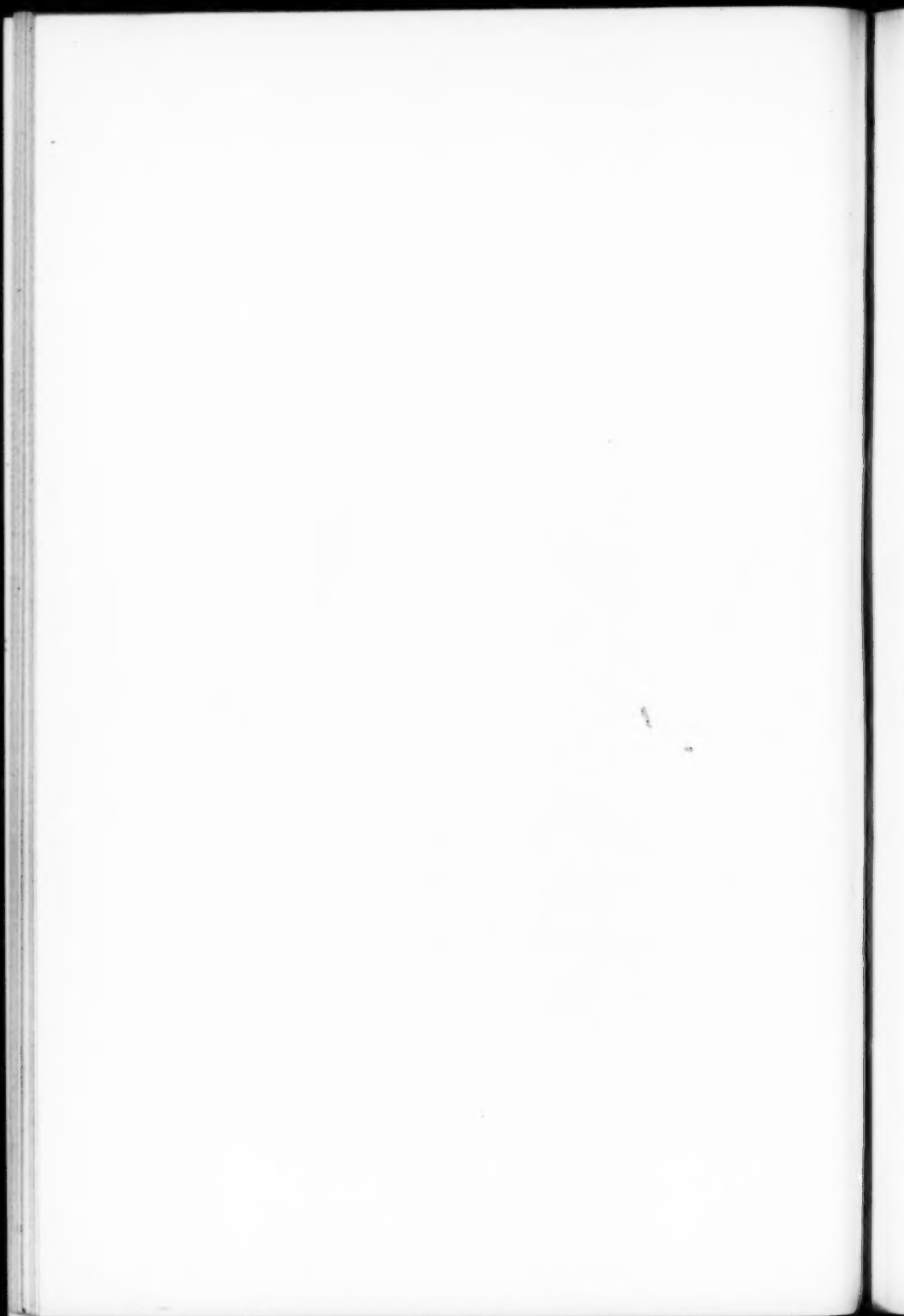
What further discoveries at Eleusis may reveal we cannot predict. But it is satisfactory to trace that touch of Egypt

which has been so often suspected and asserted, neither in the mythological past, of which we have no certain knowledge, nor in the period commencing with the Ptolemies, when Egypt poured herself upon Greece, and Greece in return poured herself upon Egypt, but in the times when the Hellenic peoples, conscious of their power, were girding themselves for the race. Then it was that Egypt passed along her torch, the best thing she had to give, to a swifter runner in the world's great *Lampadephoria*.

RUFUS B. RICHARDSON.



CORINTH IN 1898: GENERAL VIEW OF EXCAVATIONS





CORINTH IN 1898: ANCIENT ROAD



CORINTH IN 1898: PIRENE



American School
of Classical Studies
at Athens

THE EXCAVATIONS AT CORINTH IN 1898

PRELIMINARY REPORT

[PLATES IX-XI]

WORK was begun at Corinth this year on March 23, and continued until June 11. I was present during the whole period with the exception of a few necessary absences of a day or two in Athens. Messrs. Brown and Dickerman assisted most efficiently from beginning to end. Professor Emerson was present about half of the time, and has taken the publication of the inscriptions in charge, and Dr. Cooley was occupied for nearly two months in photographing, and making the plans. He also remained two weeks after the close of the work to complete his measurements and drawings, being stopped at last by an attack of fever. Mr. Chase was also present for about a week.

The work was mainly confined in area to about an acre in the valley and on the side hill east of the temple and south of Trench III (PLATE IX); see the plan of excavations in the *Annual Report of the School for 1895-96*, p. 30 (repeated in this *Journal*, Vol. I, 1897, pl. xiv). The earth was carried to fields farther north, which had been tested and found to cover nothing important. For this transportation a track and twelve cars were borrowed from the French School. A force of about one hundred men was employed; and nearly \$3000 was expended in the actual work of the season.

A fuller report of the results, which are very satisfactory, will be given when the plans are ready. A brief summary, therefore, will suffice here.

(1) *Sculpture*: Five life-size and over life-size marble statues (unfortunately without heads), among which a nude female torso holds the first rank. Several reliefs more or less mutilated.

(2) *Vases*: An early geometric amphora 0.56 m. high, intact, with some other geometric vases in fragments; also a considerable quantity of Old Corinthian pottery mostly in fragments.

(3) *Bronzes*: A cock and a bull, each about two inches long.

(4) *Inscriptions*: One of the very oldest times, but unfortunately fragmentary; another of Roman times from the Jewish synagogue; a large number of other inscriptions both Greek and Roman mostly fragmentary.

(5) *Terra-cottas*: Several reliefs of a good period; a few figurines; architectural ornaments, notably lions' heads in a vine ornament.

(6) *Architecture*: Among the numerous pieces may be mentioned several capitals of different sizes composed of a calyx of lotus springing out of acanthus leaves, and some finely carved pieces of entablature, as well as six cornice pieces, with lions' heads, of Roman times; two fallen columns, not hitherto known, of the old temple.

But the more important results are the following:

(1) The discovery of a long building on the side of the valley towards the temple, consisting of a long wall running north and south with walls projecting from it to the east. This appears to be a stoa of Greek times.

(2) The uncovering to some extent of the white limestone pavement (PLATE X), which in 1896 inspired the hope that the Agora might be found near at hand, and so led to the choice of this field for our first serious attack. At a short distance to the south of Trench III, our starting-point, the pavement reaches the foot of a broad flight of more than thirty marble steps not yet entirely uncovered, which, as we now know, led up towards the Agora close at hand. By several soundings we proved the existence of the paved way in the other direction to a distance of about a third of a mile, almost to the northern edge of the

ancient city, and there remains little doubt that this was the straight road to Lechaëum (Paus. II, 3, 4).

(3) The discovery of Pirene (PLATE XI). This alone would make the campaign successful. At the southern limit of the excavation there was found a series of chambers constructed under the edge of a ledge of conglomerate rock by cutting away the softer clay rock below and inserting cross walls for

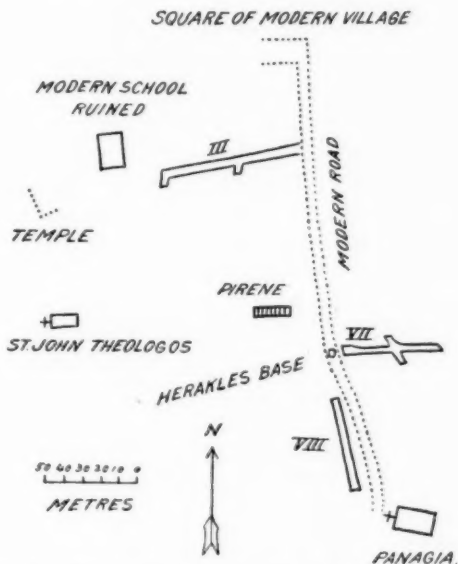


FIGURE 1. — EXCAVATIONS IN CORINTH IN 1898: SKETCH PLAN.

the support of the ledge. Along the back of the series the water was led in a channel from which in its course it overflowed into the chambers. The whole system corresponds so exactly to Pausanias's description of Pirene (II, 3, 3) as a series of cave-like chambers that it hardly needed the corroboration of a fragment of a Roman inscription, containing the word "Pirene," found within two feet of the façade, to exclude all doubt of the identity.

Three different periods in the architecture, one older and one later than what Pausanias saw, are clearly discernible. There is also proof that earlier than the earliest façade of which we have remains, the water was delivered at a much lower level through an arched channel which recalls the Cloaca Maxima. This was probably the Pirene of Periander. The fact that the water supply of the modern village still flows through the ancient courses made the excavation here difficult and anxious work.

Pirene as now uncovered is important as a capital example of the elaborate fountain façades which appear so often on Greek vases; it is still more important in that in it is given back to us the most famous fountain of Greece; but it is of supreme moment for the enterprise of excavating Corinth, since it gives the key to the topography of the city. From the description of Pausanias (II, 3, 2), we know that Pirene was a little distance north of the agora on the road to Lechaëum. The position of the agora being fixed, the old temple now receives its right name. It is the temple of Apollo, the first object mentioned by Pausanias on the right as one goes from the agora to Sicyon (II, 3, 6). The period of groping in the work at Corinth is past. It is now a question of time and patience and money. Two trenches dug about one hundred yards farther south than Pirene disclosed five walls that probably belong to the Agora. The peribolus of Apollo *πρὸς τῇ Παιρήνῃ* (Paus. II, 3, 3) has also been found and excavated. We have all the time there is; the patience is promised; and if the money can be had, "wealthy" Corinth is going to give its buried secrets, and the world will not be indifferent.

RUFUS B. RICHARDSON.

1897
August — December

1898
January, February

ARCHAEOLOGICAL DISCUSSIONS¹

SUMMARIES OF ORIGINAL ARTICLES CHIEFLY IN RECENT PERIODICALS

GENERAL AND MISCELLANEOUS

ANTHROPOLOGICAL NOTES. — G. Zumoffen, of Beyrout, has contributed to *L'Anthropologie* a memoir on the stone age in Phoenicia. Palaeolithic objects have been found in seven stations, and neolithic in four. The author himself discovered three years ago a neolithic workshop at Nahr Zaharani. The palaeolithic implements belong in general to the Chelléan and Mousterian types. Further investigation appears in many places to be called for and would be likely to be rewarded by interesting discoveries.

MM. Laville and Mansuy publish in *L'Anthropologie* an account of their recent researches in the prehistoric stations of Hautes-Bruyères, in the department of the Seine, with the description of the human remains by Dr. R. Verneau. The objects found are neolithic and include many fragments of pottery. The two crania found are dolichocephalic, one of them having an index as low as 69:27. Dr. Verneau found traces of intermixture of the predominant dolichocephalic race with the race of Furfooz.

On the hint given by Mr. Henry Balfour's history of an Aghori fakir, the Marquis de Nadaillac has collected a number of instances of the use of human skulls as drinking-cups and in religious ceremonies among savage peoples.

In the *Revue de l'Art Ancien et Moderne* for September, 1897 (No. 6), Professor Henri Mayeux has a *causerie* on the 'Infancy of Art,' from its birth among the prehistoric carvers and engravers whose lifelike imitations of animal forms have been discovered in various places. The father of Art was Chance, and its mother was Nature, he says, but he does ample justice to the sincerity which these early artists displayed, both in sculpture and in drawing, in their imitation of the natural forms they saw.

M. Paul du Chatellier, who is the possessor of a fine collection of prehistoric objects at Kernuz (Finistère), has published a monograph on *La Poterie aux Époques Préhistorique et Gauloise en Armorique* (4to, 60 pages, 17 plates), which is described by M. G. de Mortillet as an excellent work and very helpful to prehistoric students. (*Athen.* October 9, 1897.)

¹ For an explanation of abbreviations, see p. 346.

THE ORIGIN OF ART.—In the *Sitzungsberichte der k. preussischen Akademie d. Wissenschaften*, 1897, pp. 98–109, is a paper by A. Conze on the origin of the arts of design. A comparison of the primitive art of different peoples leads to the conclusion that the earliest art was an attempt to represent what the artist actually saw about him. Then details were omitted or conventionalized, and a beginning was made of a geometrical style. The development of the geometrical style was then aided by the natural occurrence of geometrical lines in weaving. In Greece this geometrical style was overpowered by the influence of the more advanced art of the east, to revive again after the coming of the Dorians.

THE ORIENTAL NUDE GODDESS.—Among the terra-cottas from the excavations at Nippur, are small figures of a goddess of fertility which, according to Dr. Hilprecht, belong to the lower strata, those of Sargon I (ca. 3800 B.C.) and Ur Gur (ca. 2800 B.C.). A comparison of certain of these with the primitive nude-goddess idols of Cyprus shows similarity in the position of the arms on the breast; in the swollen hips; the bird-face, with hooked nose, round eyes laid on separately, and no mouth; and in the ornaments, consisting of necklace and girdle or apron. These resemblances are too great to be accidental, and as no one would claim that Oriental art was influenced by European art so early as 3000 and 4000 B.C., it is evident that the nude-goddess type travelled westward *via* Cyprus to the Aegean, not *vice versa* (v. S. Reinach, *Rev. Arch.* 1895, p. 367). Whether the worship of a particular goddess took the same course, is another question. (H. v. FRITZE, *Jb. Arch. I.* 1897, pp. 199 ff.; 4 cuts.)

NUDE FIGURES IN PREHISTORIC ART.—At the recent congress of Orientalists, S. Reinach read a paper in support of his theory that the representation of the nude female figure in art did not come from Babylonia to Greece, but passed from Greece to Babylonia. In support of his theory of the passage of this type from west to east, he showed a figurine found at Mentone, which dates apparently from the end of the palaeolithic period; *i. e.* about 6000 B.C. (*Nation*, October 7, 1897.)

THE CHINESE "DE MONSTRIS."—In the *R. Arch.* XXXI, 1897, pp. 353–373, F. de Mély writes of the Chinese *De Monstris* and the Occidental *Bestiaria*. Forty cuts accompany the text. Most of the monstrous combinations of human and animal forms found in the Chinese books are also met with in the legends, literatures, and arts of Western peoples. In some Chinese sculptures of the second century after Christ, Greek influence is evident; but whether the Chinese borrowed their monsters and tales of monsters from the Western nations, or derived them from some earlier common source, is not clear. It may be that the exportation of small works of art aided in the migrations of legends and myths.

RELATION OF AEGAEAN AND EARLY ITALIC CIVILIZATION.—In *B. Paletn. It.* 1897, pp. 81–85, E. Petersen calls attention to the similarity of many Aegaeon ornaments to objects of primitive Italic art and

industry, illustrating his remarks with numerous cuts. In the following pages (86-89) L. Pigorini calls attention to the fact that the Italic objects cited by Petersen belong to different dates in a long period, while the Aegæan ornaments belong to a comparatively short time. He believes that there was connection between Italy and the eastern Mediterranean in early times, but does not agree with Petersen in details.

EGYPT

RECENT RESEARCH IN EGYPT.—The *S. S. Times*, January 22, 1898, contains a letter from A. H. Sayce on recent discoveries in Egypt. He describes the finding by de Morgan of the tomb of Menes near Thebes. The discoveries there show that at the very beginning of Egyptian history the system of hieroglyphic writing was already fully developed, and that the art was far advanced. The use of bronzes shows intercourse with distant lands; for the tin, with which the copper is mixed, must have been derived either from India and the Malayan peninsula or from Spain and Britain. Obsidian also occurs there, the nearest source of which is the islands of Santorin and Melos. Side by side with these indications of a highly advanced culture were found many flint instruments, and also pottery characteristic of a race different from the Pharaonic Egyptians. The tombs fell into two classes, representing either two periods or two races, or, more probably, both. In those of the first class the dead are buried in a crouching position. In those of the second period the bones are scattered about the sepulchre, some of them being wanting. Pottery characteristic of the first or earlier class of tombs is either of a rich red color, with its principal part black, or is decorated with white patterns incised on a red ground. In the second class of tombs the pottery is usually drab in color, figures of men and animals, birds and beasts, being painted upon it. Geometrical designs are also frequent, and in some cases the tomb is made to imitate granite. The bird most commonly represented is the ostrich. Along with this red and drab pottery are found stone vases, often of the hardest materials, as well as flint instruments of marvellous workmanship. As simple flint instruments and stone vases have been met with in the tombs of Menes and the other kings of the first dynasty, it is evident that the races and neolithic civilization which produced them must have lasted down to the period when Egypt became a single monarchy. Part of the work of Menes must have been the subjection of the people of whom these are the records, and who preceded the Pharaonic Egyptians in the possession of the valley of the Nile. The discoveries of the last two years have thus shown that the Pharaonic Egyptians, the Egyptians of history, were immigrants from another land, and various indications point to Babylonia as the land of their origin.

In the same periodical, February 19, 1898, W. M. Flinders Petrie briefly discusses recent discoveries in Egypt. The discovery of the tomb of Menes and of tombs of other early Egyptian kings shows that the first Egyptian

dynasties are historical. Remains of a prehistoric race found across the Nile from Coptos, some 20 miles north of Thebes, show a civilization different from that of the Egyptians. These remains are as early as 5000 B.C. At Deshasheh, about 80 miles south of Cairo, in tombs of about 3500 B.C., two manners of treating corpses appear, but the bodies themselves are alike. Evidently the two races had become fused, but different customs had been preserved in different strata of society. In an inscription in the tomb of Merenptah (the Pharaoh of the Exodus), the name of Israel is found so used as to show that there were at that time (about 1200 B.C.) Israelites in Palestine. The "Logia" of Jesus are also briefly discussed.

THE NAME OF KING MENES.—In the *Sitzungsberichte d. k. preuss. Akad. d. Wissenschaften*, 1897, pp. 1054-1058, L. Borchardt publishes (two figs.) a broken tablet of ivory found in a grave of the first dynasty, opened by de Morgan at Neggadeh. A sacrificial ceremony is represented, and the name of the king for whom the sacrifice is offered is represented by the sign equivalent to MN. This can be no other than Menes, the first king of the first dynasty.

SARAPIS.—The Babylonian healing-god, Sarapis, consulted during Alexander's last illness (Arrian, VII, 26), was the god Ea, worshipped under the title *šar apsi*, King of the Ocean. Ptolemy, in adopting into his kingdom this god, father of Bêl-Marduk, the chief and representative divinity of the old Babylonian world-empire which Alexander had intended to revive, thought to strengthen his claims to the succession of Alexander, as against Seleucus. For want of a genuine statue of the god, an old image of Pluto, with Cerberus and snakes, from Sinope, was made to serve, as sufficiently like the half-man-half-beast form of Ea. The Cerberus assisted in the union of the new divinity, as Osorapis, with Osiris, the god of the dead; and the serpents, with Aesculapius; while his Babylonian name Ea, Iav, Iaw, caused the Gnostics, in later times, to identify him with the Jewish Jahveh. (LEHMANN, at the November, 1897, meeting of the Berlin Archaeological Society, *Arch. Anz.* 1897, pp. 168 ff.)

BABYLONIA AND ASSYRIA

KING OUROU-KAGHINA.—In the *C. R. Acad. Insc.* 1897, pp. 427-429, is a brief communication from Léon Heuzey concerning some fragmentary inscriptions of King Ourou-kaghina, of Sirpourla, from which it appears that his date is earlier than that of Naram-Sin (the thirty-eighth century B.C.). The inscriptions relate to the buildings of the king.

A DYNASTY OF USURPERS.—In the *C. R. Acad. Insc.* 1897, pp. 495-497, J. Oppert discusses the successors of Nabuchodonosor, who died in August, 562 B.C. The kingdom passed to his son Evil-Merodach, who was murdered by his brother-in-law, Neriglissor or Nergal-sar-usur, in 560 B.C. Neriglissor reigned four years and was succeeded by his son Labasi-Marduk,

in 556 B.C. Labasi-Marduk reigned but one month. Nerglissor calls himself "son of Bel-sun-iskun, King of Babylon." The date of Bel-sun-iskun's reign is nowhere mentioned, but must apparently be between March 3 and August 13, in the year 561 B.C. If Bel-sun-iskun usurped the power and was killed by Evil-Merodach, the murder of the latter by Nerglissor appears as an act of vengeance.

A COMMERCIAL GOD.—In the *C. R. Acad. Insc.* 1897, pp. 469-488, is an article by J. Oppert on the commercial operations carried on by the sun-god at Sippara, which can be traced back to the twenty-sixth century B.C., and probably began much earlier. The god was a rich landowner, and traded in live stock and all sorts of agricultural produce, using a peculiar system of weights and measures which is explained at some length. He did not, however, trade in human slaves.

PALESTINE

The Madaba Mosaic.—In the *C. R. Acad. Insc.* 1897, pp. 490-492, Father Lagrange has a communication concerning the church at Madaba and its inscriptions. The church was finished in 502. The correct reading of the inscription in the great mosaic is that of Michon, giving the date 490.

JERUSALEM.—**The Tombs of David and the Kings of Judah.**—In the *C. R. Acad. Insc.* 1897, pp. 383-427, is a paper by Clermont-Ganneau on the exact position of these tombs. He concludes that they are in the hill of Ophel, north of the curve in the so-called aqueduct of Siloam, not south of it where Bliss looked for them. This view is supported by detailed arguments drawn from the topography of the hill, the nature of the aqueduct, and literary sources. Two plans and a cut accompany the text. Here and in the *Athenaeum*, September 11, 1897, Clermont-Ganneau claims that the idea of looking for these tombs in the hill of Ophel was borrowed from him by Bliss.

ISRAELITE SEAL.—In the *C. R. Acad. Insc.* 1897, p. 374, Clermont-Ganneau publishes a scaraboid seal with Israelite Phoenician inscription, found by Bliss near the hill of Ophel, at Jerusalem. Clermont-Ganneau reads Ichmael Pedayahon, the last name being that of several biblical personages, and signifying "Jehovah has delivered."

SYRIA

Sites and Remains.—In *B.C.H.* XXI, pp. 66-91, pls. ii-iv, Perdrizet and Fossey begin the publication of some results of a trip in Northern Syria, from Damascus to Alexandretta, including Baalbec, Antioch, Seleucia, and Sindjirli, besides many smaller places.

The first part of the paper contains twenty-seven inscriptions, chiefly funerary or honorary, all short, and many very fragmentary: among them

are five in Latin. Here are also mentioned a relief of a soldier and a good bronze statuette of the common type of Aphrodite Anadyomene, which was found in a tomb with a tile of the year 218 of the Seleucian era; *i. e.* 94-95 B.C.

The second part is devoted to sculptured monuments. First are described and illustrated (pl. ii) rock sculptures near Antioch, unnoticed in the guide-books, though mentioned by both Chesney and Renan (*C. R. Acad. Insc.* 1865, p. 308), whose description is given in full. One of these sculptures is a colossal head covered probably by a Phrygian cap, but with the bust undraped. It is very badly mutilated, and Renan thought it draped. The other is a standing figure, also colossal, but not so large as the head, and apparently leaning on a lance, thyrsus, or inverted torch. Renan referred the head to a colossal Charon, said to have been carved in the rocks above Antioch to check a plague. The present editors point out that Charon cannot be beardless, that the two figures must belong together, that they are in a necropolis, and hence prefer to see in them Mithras, attended by Attis. They prefer to explain the story in Malalas and Tzetzes as a popular legend, which had grown up after the passing of the old Greek or Asiatic mythology. Charon as a name lingers even to the present time in the folk-lore of Greece. In the valley of Melas (Karason) are several pieces of sculpture. Two are funerary reliefs belonging to the Seleucian or imperial times. One shows the members of the family seated in two rows, above, a matron between two men, below, two boys. The other is a stele showing in a niche a horseman followed by a slave on foot. Near the modern village of Kara Moughara is a steep rock filled with niches and tombs (pl. iii). One of the tombs is of great size and has around the entrance a long Greek inscription, which is to be published later. Above this tomb are two niches, each containing a seated figure, and near the top of the rock a long niche containing apparently five female figures. In this neighborhood are remains of a small Ionic temple of good material. Near by are some "Hittite" sculptures in basalt, one of which represents a beardless man riding on what seems to be an antelope (pl. iv). There are also fragments of a relief of a standing figure, and of two lions in the round. Plate iv also reproduces a bust found near Antioch and in private possession in that city. It is a bust in basalt, which bears a strong resemblance to Assyrian art, but on account of the material, and a likeness to the statue of Hadad, is probably the work of a native artist. It is elaborately wrought and originally was richly decorated, so that it is likely that it belonged to a statue of some god.

Antiochia on the Orontes. (In memory of Otfried Müller, born August 28, 1797.) — From observations made on the spot, in March, 1896, and from the use of other evidence accumulated since the appearance of C. O. Müller's *Antiquitates Antiochenae*, sixty years ago, the following sketch of ancient Antioch on the Orontes is drawn.

The earliest literary sources, the chief of which is the chronicle of Joannes Malalas, go back to contemporary records of the early centuries of the city. Some of the buildings mentioned by Malalas can be traced, and show the

substantial accuracy of his topography. Of these, the theatre, of a size suitable to such a city as Antioch, can be seen on the slope beneath the Acropolis, and it even shows the four stories attributed to successive building by Caesar, Agrippa, Tiberius, and Trajan. A circus and the public baths of Diocletian are recognizable at the point where the Orontes approaches the northeast corner of the wall. Of Diocletian's subterranean sanctuary of Hecate, in Daphne, at least the entrance, with many steps, has apparently been preserved; and there is still a huge veiled head, with features now obliterated, cut in relief in the rock above the city, agreeing with Malalas's description of the Charonium.

The city, built by Seleucus as his capital, and designed rather for convenience than for defence, was placed in the plain between Mount Silpius on the south, and the navigable Orontes on the north. The interpretation of the Antiochia of Eutychides (Helbig, *Führer*, I, 280), as representing the situation of the city on the mountain, is false; rather the figure of Tyche is seated on the mountain because, as the genius of the city, she protects it from above. The little Orontes, too, on which she rests her foot, represents, with his vigorous action, not the reappearance of the stream after its underground course (for this occurs far above the city), but the tendency to sudden inundation, from which the Tyche gives protection.

From the first, the city had its longest extent from east to west, was surrounded by a wall, and contained a large population. Of the immediate successors of Seleucus, Antiochus the Great (222-187), according to Libanius, made the first enlargement of the city by building on the island in the river, and settling there fugitives from Aetolia, Crete, and Euboea. As Strabo, however, attributes one of the four parts of the city of his time to Seleucus Callinicus, and none to Antiochus, it is probable that Seleucus began the work, and Antiochus finished it. These kings seem to have had their palace on the island, for a building called the *regia* existed there in Roman times, in addition to the Roman imperial palace.

The next enlargement of the city, not to increase the disproportion between length and breadth, was made to the south, in the direction of Silpius, and it was called Epiphania, from its founder Antiochus Epiphanes. According to Malalas, this was a suburb, *i. e.* not fortified, until Tiberius built a wall; but Strabo, or more properly Posidonius, from whom he draws, and also Diodorus, when speaking of the time of the kings, say that the city had four parts all separately fortified. It is possible that the wall was built by Tiberius in 20 B.C., and so existed when Strabo wrote his sixteenth book and Diodorus his twentieth; but more probably, as Tiberius certainly completed the temple of Jupiter Capitolinus begun by Epiphanes, so in the case of the fortification, Malalas mistakes an extension or repairing of the old wall for a new construction.

Strabo's four parts include, beside these three known from Malalas and Libanius, one which may have been assigned to the inhabitants of Acropolis and Iopolis when the new city was built in the plain.

Malalas is probably right in assigning to Tiberius the great colonnaded

street which traversed Epiphania from east to west, for if Epiphanes had built it, neither Livy (XLI, 20), where he praises the splendid works of this king, nor Libanius, in speaking of those of the Seleucidae, would have failed to mention it. But comparing another passage of Malalas, which ascribes the paving of the street to Herodes, and one of Josephus which calls it the work of Herodes, we may conclude that the original plan was that of the Jewish king, while Tiberius added the colonnades, as he certainly rebuilt the eastern gate. Furthermore, the statue of Tiberius was erected by the citizens, at the central point of the street from which a second colonnade led northward. The Nymphaeum, a canopy supported by columns, which marked the beginning of this second street, may have been built by Caligula, as Malalas says, if Tiberius made the main colonnade.

The colonnades of the island, forming a separate system, are of a later part of the imperial period. They ran in four directions from a tetrapylon in the centre of the nearly circular island, three of them extending to the outer wall, but the one toward the north being cut short by the huge palace to which it formed the approach. As this palace, dominating the system of colonnades and evidently no afterthought, was begun by Gallienus and completed by Diocletian, their dates are also those of the remodelling of this part of the city from which it took the name of the New City.

The suburbs which grew up north of the island and in other directions equalled the city itself in extent, population, and splendor. The finest of them, that on the west toward Daphne, was included in the city wall by Theodosius the Great, according to Malalas, but more probably by the younger Theodosius (408-450). This new wall, like that of Epiphania, ascended the mountain, taking in Iopolis, the westernmost height. The material was taken from the amphitheatre and aqueducts. The part that ascended the mountain was in good preservation until recent years, and good pictures of it are accessible.

In the earthquake of 457-458, the New City suffered severely. That of 526 affected the whole city, and in 528 the wall was overthrown, but immediately rebuilt for fear of the Persians, except at one spot on the mountain where Chosroes did in fact make his entrance. The Persians at this time laid waste everything within the walls, and Justinian, in rebuilding, greatly reduced the size of the city. He abandoned the island and some tracts south of the river, making the northern wall nearly straight, and protecting it by a canal, the line of which can still be traced.

After his time, no change was made in the position of the walls. They gradually fell into decay from earthquakes, sieges, and the plundering of the stones for building material. Since 1872, there has been no restriction on this last method of demolition. All notices of the walls since the time of Justinian refer to those built by him, and as the accounts of their extent differ greatly, a thorough investigation is needed to establish the truth. (R. FÖRSTER, *Jb. Arch. I.* 1897, pp. 103-149; 1 plan, 12 cuts.)

ASIA MINOR

EASTERN ASIA MINOR.—**The Road Systems.**—The important roads through Asia Minor, from the west, have always converged at Mazaca-Caesarea (Kaesariye) and radiated thence to the east and south, crossing the Taurus and Antitaurus by various passes. Of the two chief ancient roads eastward from Caesarea, one (I) ran nearly east through Arasaxa, Larissa, Tzamandus, and Gurus, down the valley of the Melas (Tochma Su) to Melitene (Malatia), and crossed the Euphrates at Tomisa, where it forked, one branch running up the Murad Tchai to Chliat on Lake Van, while the other, bending southeast, reached the Tigris at Amida (Diarbekr) (from which a cross-road led also to Chliat), and followed the Tigris down to Nineveh and Arbela. This road was the great trade route between Ephesus and the Euphrates, even in Strabo's time. It was the Persian Royal Road, and it was regularly used in Byzantine times by the imperial expeditions against Persia and by Turkish raids into Asia Minor. The other (II) was the Roman military road, which ran to the south from Arasaxa, crossing Antitaurus by the pass of Kuru Tchai to Coccusus (Geuksun), whence it turned northeast toward Arabissus, and joined the other road at Melitene. It is traced by milestones, which show it to have been constructed or rebuilt by Septimius Severus, *i. e.* not earlier than 200 A.D., and its purpose was to connect with the important centre, Germanicea (Marash), to which several branches ran, and with the Syrian frontier.

Southward from Caesarea there were two routes passing to the east of Mount Argæus to Sision (Sis) and the coast, and two on the west of the mountain leading to the Cilician Gates and Tarsus, the longer of which, by Tyana and Loulon, was the easier.

Melitene was connected with Samosata to the south, and Germanicea to the southwest, by a road which branched at Surgi, near Zapetra; and with Samosata probably, also, by a road which followed the right bank of the Euphrates from a point near Tomisa. Somewhere on this route was Claudias.

Sebastea (Sivas), a centre only second in importance to Caesarea, was directly connected with the latter by a road which followed the course of the Halys. Two routes were open to Germanicea, — one which ran south to Tzamandus and joined the Roman military road (II) at the Kuru Tchai pass; another, which crossed routes I and II farther to the east, at Gurus and Arabissus. A road which was of importance in the Paulician revolt of the ninth century ran to Tephrike (Devrik) and to Zimara on the Euphrates. All of these roads except the last were Roman.

Among the positions recently identified by Professor Ramsay and others, which help to determine the course of these roads, are: Tzamandus (Azizie); Ariarathia (near Herpa); Lapara-Lycandus (the Paulician city of Locana); Romanopolis (Palu); the district of Hanzit; Claudias on the Euphrates; Caisus (Kabissos, τὸ καίσσιον); and the impregnable fortress passed by the crusaders in 1097 (Zengibar Kalesi). The accompanying

map is used to explain several marches of the Byzantine emperors and of the crusaders, and an excursus on the Royal Road shows how untrustworthy are Herodotus's ideas of the extent of Cilicia. (J. G. C. ANDERSON, *J.H.S.* April, 1897, pp. 22-44; 1 map.)

THE SITE OF GORDIUM.—In *Athen. Mith.* XXII, pp. 1-28, pls. i, ii, A. Körte endeavors to determine exactly the site of Gordium. An examination of the ancient authorities shows that Gordium lay on the Sangarius at the point where the highway from Susa to Sardis crossed that river. This road fell into disuse after the fall of the Persian monarchy, and after the Christian era we scarcely hear of the city. At the point where the new Anatolian railway from Ancyra to the west crosses the Sangarius (Sakaria) are the remains of an old pre-Hellenic settlement, which Naumann and Körte, in 1893, identified as Gordium. For the settlement of the question it is necessary to examine Liv. XXXVIII, 12-17, which contains an account of the march of Cn. Manlius Volso against the Galatians. The march of Manlius from Synnada is traced day by day, in the light of a journey by Körte over the same route, and shown to agree with this site for Gordium, near Pebi. Two hills at this point show traces of ancient habitation. There are few remains of walls, and one of the hills was so thoroughly used as a quarry in building the railroad, that scarcely a stone can be found. The date can be partly determined, as usual, by fragments of pottery, which cover the tops of the hills, and appear in the cuttings made by the engineers. The greater part of these belong to a monochrome type very similar to the Trojan, and as other discoveries have proved the connection between the Trojan and Phrygian civilizations, these potsherds prove the high antiquity of this settlement. The situation agrees well with the other Phrygian cities, which are built on low flat hills rather than on high cliffs. There are no remains of any importance from Roman times, no inscriptions or architectural fragments. Its importance as a Phrygian capital is clear from its necropolis, which numbers more than twenty tumuli, and is one of the largest in Asia Minor. Two objects from Gordium are published. One is a cup, of a form common in the lower layers at Troy, decorated with incised lines. With other finds, this tends to show that the Phrygian civilization is at least as old as the sixth city at Troy. The other object is the upper part of a stone statuette of a draped goddess clasping an attribute to her breast. It is very rude, but certainly copied from some archaic Greek work of the sixth century.

TOPOGRAPHY OF ASIA MINOR.—In the *Athenaeum*, October 23, 1897, is a letter from J. G. C. Anderson on the topography of Asia Minor. He supports Ramsay's views as to the river Caprus and the site of Appameia, and fixes the sites of Trapezopolis, Cidramus, Sanaus, and Cinnaborium. In the same number is a note by W. M. Ramsay recognizing Anderson's good work in Asia Minor.

Pergamon.—The city occupied a hill three or four hundred metres high, precipitous on three sides, but descending in terraces toward the sea

on the south. At the highest, *i. e.* northern, part, is a plateau measuring 270 m. north to south, and 120 m. east to west, which was occupied in the fourth century and was the stronghold of Philetaerus, the founder of the Attalid family, in the following century. Here was the great temple of Athena, built of the native stone in the fourth century. All extensions of the fortified area, naturally, were to the south, the first one merely enclosing the market-place, which had grown up outside of the old town gate. At this stage the city resembled Mycenae when the wall of the Lion Gate had been built. A later wall, probably of the time of Attalus I, doubled the extent of the city, but kept within a natural terrace which overhangs the site of the later Gymnasium, on the south; and one still later, of the showy masonry of the time of Eumenes II, extended the city east, west, and south, to the foot of the hill. The unfortified Roman city spread over the surrounding plain, and bore to the old city on the hill much the same relation that modern Edinburgh bears to its Old Town, with the Castle and the unfashionable quarters. Later, as times grew more insecure, the city retired to its original area by an almost exact reversal of the steps of its expansion, except that the Byzantine wall corresponding to that of Attalus I included also the Gymnasium. In the next to the highest wall, around the Agora, the marble fragments of the great altar have been found. Since the Mohammedan conquest, the hill has not been inhabited, the present Turkish town covering only a part of the Roman city at the foot. Everything else has been overthrown and covered up by time. Many points outside of the small area already excavated promise interesting results when they shall be studied. (A. CONZE, *Winckelmannsfest of Berlin Arch. Soc.*, December, 1897, *Arch. Anz.* 1897, pp. 170-178; 1 plan.)

Priene.—The Hellenistic city, laid out under Alexander and consisting almost entirely of buildings of the third century, is now laid bare in its ground plan, public buildings, and private houses. The steeply sloping ground, at the south foot of the acropolis rock, was, by means of much cutting and filling, adapted to a strictly rectangular scheme, in which the blocks, each containing four house plots, are separated by broad streets running with the terraces east and west, and by steep, narrow cross-streets. The houses all have a rectangular inner court, surrounded on two or more sides by rooms, and communicating with the outside world only by a door on the side street. They are often exquisitely decorated and furnished within, in a style resembling the first, *i. e.* Greek, period at Pompeii. The streets have no foot-paths, but covered stone gutters and pipes to supply fresh water to the separate houses and the fountains at street corners. The market-place, occupying the space of two squares on the south side of the main street, is surrounded on the other three sides by colonnades decorated with marble benches and bronze and marble statues, and has the great altar of the city in the middle. Opposite it, on the north side of the street, is another splendid colonnade, similarly adorned, and having its walls covered with inscriptions valuable for the history of the time and place. From this North Hall open two public buildings, one of them apparently the Pryta-

neum, differing from the private houses only in having a large door on the front; the other an assembly hall for about six hundred persons, resembling a small theatre but for its rectangular shape. It has a large round-arch window on the front, the first known instance of a pre-Roman arch in a conspicuous place. The temple of Asclepius, in a sanctuary adjoining the market, has no frieze between architrave and cornice,—a peculiarity new in Ionic temples, but now found to occur also in the temple of Athena here. The theatre has a full orchestra, as deep as it is wide, an altar *in situ* (not in the centre, but next the row of front seats, opposite the scene), and the best preserved Greek scene buildings that are known. The proscenium, the earliest known of stone, is complete, in part of its length, even to the cornice and the beams running back to the scene wall. The top of it was converted into the Roman stage by extending it backward, taking down the upper part of the scene wall. (SCHRADER, Winckelmannsfest of Berlin Arch. Soc., December, 1897, *Arch. Anz.* 1897, pp. 178-187; 2 plans, 3 cuts.)

CYPRUS.—Excavations in 1894.—(I) *Agia Paraskevi* (Nicosia District).—Fourteen tombs of a bronze-age necropolis were examined and found to fall into two classes: (a) those containing only polished red ware; (b) those containing in addition black-slip ware, the hemispherical white-slip bowls, and miscellaneous articles of pottery, bronze, gold, etc., including one of the rudest known Cypriote figurines.

(II) *Kalopsida* (Famagusta District).—A bronze-age settlement was found, with remains of a pottery. The necropolis shows two periods, characterized by (a) fine, polished, red ware with little or no bronze, and (b) coarser red ware, various later wares, importations, and imitations of Egyptian ornaments which set the time between the twelfth and the eighteenth dynasty. Mycenaean fragments are found only on the surface of the ground here and in I.

(III) *Lakshà tu Rîû* (Larnaka District).—Here a late bronze-age necropolis with Mycenaean vases was examined.

(IV) *Larnaka*.—At Turabî Teké, Graeco-Phoenician and Hellenistic tombs were examined and an analysis of the contents proved that the two classes can be distinguished by the finds, the earlier pottery and the glass, coins, etc., of later times being found in separate tombs. Tomb 56, the most important, contained, beside ring-shaped amphora-stands and various articles of pottery, a seal ring, of Egyptian design, assigned by Professor Petrie to the twenty-sixth dynasty. The tomb appears to be of the sixth century. The later tombs extend down to Graeco-Roman times, and contain glass, lamps, etc.

(V) *Larnaka: Kamelargà*.—A layer of rude votive terra-cottas was found inside the line of the city wall of Citium. Most of them had a solid head, with face pressed in a mould, set into the top of a hollow, conical object turned on the wheel. The faces are negroid and mixed Oriental, but not Hellenic. Arms, beards, and attributes were modelled by hand and stuck on when soft. The figures were finally dipped in a slip of finer clay

and painted. Others, with less conical body and head less distinctly moulded, are a survival of the earlier snow-man technique, common in tombs of the ninth and earlier centuries. A later development of the funnel-shaped figures are those made in one piece, pressed in a full-length mould. Among the types are tambourine-players, suppliants, votaries, warriors. Some larger figures, quarter life-size, and a few stone figures were found. The extreme dates seem to be the seventh and the end of the fourth century. It is not clear to whom the sanctuary belonged, but it was probably a female deity.

A small bowl from Zarukas, showing a flame-stain, is apparently a lamp, and if so, the only known Cypriote bronze-age lamp.

A few inscriptions were found, both Phoenician and Greek, of the fourth and third centuries, among them the stele of a chariot-smith, perhaps implying a guild of such craftsmen.

The greater part of the finds of these excavations are in the Ashmolean and Cyprus museums. (J. L. MYRES, *J.H.S.* 1897, I, pp. 134-173; 15 cuts.)

GREECE

ARCHITECTURE

The Ancient Temple of Athena on the Acropolis.—In *Athen. Mitth.* XXII, pp. 159-178, W. Dörpfeld publishes the fifth of his articles on the ancient temple of Athena on the Acropolis. After a brief summary of the more important discussions of this subject since 1890, Dörpfeld brings forward some new material and also modifies essentially his view of the mention of the temple in Pausanias. The two passages in Homer do not refer to the same time or building. In *Od.* VII, 80-81, the reference is to the ancient palace of Erechtheus, in which Athena doubtless had a shrine. In *Il.* II, 546-551, we have a late passage, and one which describes the situation in the seventh or sixth century. Athena has a temple on the Acropolis, and her sanctuary near her temple is the place of worship of the hero Erechtheus. The later Erechtheum is a fifth century substitute for two older temples, not one double temple. Herodotus shows the situation in his references to one temple, which can only be the building whose foundations are still visible. Cf. Herod. VIII, 53; V, 71, 72. The temple of Erechtheus (Herod. VIII, 55) held the sacred olive tree, but there is nothing to show that it was the same as the temple of Athena. This agrees with the Hecatompedon inscription which mentions only one Naos, and one Pronaos. The *ταμείον* of this inscription refers to the western rooms, which were used as storerooms, and doubtless included the treasury of the goddess. The temple could not have been utterly destroyed by the Persians, but only burned and the decorations destroyed. This is clear from the remains, which are by no means so damaged as in a completely razed structure. The whole temple and that of Erechtheus were restored, as is plain from the language of Herodotus, and the colonnade was only removed to make

room for the new double temple of Athena and Erechtheus at the end of the fifth century. The stones ἀπὸ τῆς στοᾶς in the Erechtheum inscriptions were probably from the old temple. The blocks from the stylobate of the colonnade are all in the steps between the Parthenon and Chalcothece, which were built about this time. When the Parthenon was begun is not yet settled; but it was not intended to replace the old temple, as is clear from its situation. As soon as it was begun, the name ἀρχαῖος ναός must have come into use, and this occurs for the first time in an inscription of the time of Cimon (*C.I.A.* I, 1). Dörpfeld still maintains that παρθενών and ὁπισθοδόμος in contemporary official inscriptions cannot indicate the same place, and furthermore that an isolated building cannot be called ὁπισθοδόμος. Ναός means properly the sanctuary, though its use is extended to the whole building. The back part of the old temple, especially when the colonnade was gone, could rightly be said to lie ὁπισθεν τοῦ τῆς Ἀθηνᾶς ναοῦ. Possibly the name Parthenon for the rear room of the new temple is due to this being the spot where αἱ παρθένοι wove the sacred peplos. Even after the building of the Erechtheum the old cult statue remained in the old temple. Strabo, IX, 396, and Pausanias, I, 26, 6, show that the ever-burning lamp and the statue were in the same place and that was the old temple. This makes Pausanias's description clear. He describes first the Erechtheum, then the old temple, and then the Pandroseum, three separate buildings, not parts of the Erechtheum. This also removes the obstacle to believing that Callimachus, the maker of the lamp, was a contemporary of Calamis. The Erechtheum was never called the Polias temple or Athena temple, and only during its building was it called ναὸς ἐν ᾧ τὸ ἀρχαῖον ἄγαλμα, for the purpose implied by this name was not carried out. There is no proof of a cult of Athena in it. It is possible that the old temple remained standing until Byzantine or even Mediaeval times.

The Lighting of the Parthenon.—At a meeting of the German Archaeological Institute in Athens, February 2, 1898, Ziller discussed the question of the lighting of the Parthenon. He believed that the temple was lit from above and proposed a plan of the ceiling differing from earlier restorations. (*Athen.* March 5, 1898; *Berl. Phil.* W. March 5, 1898.)

The Theatre Question.—In *Hermes*, 1897, pp. 421-453, C. Robert discusses a variety of questions relating to the Greek theatre of the fifth century B.C. Some of the points in which Robert differs from Dörpfeld and Reisch, *Das Griechische Theater*, are the following. A subterranean passage was not only necessary in such plays as the Prometheus and the Peace, but the remains of the theatre at Athens support the belief that it existed there. The scene-building was not built with its front forming a tangent to the circle of the orchestra, but rather a sector. In this way the chorus still has room enough, and the scene-building need not be so long as Dörpfeld makes it. The scene-building was only one story high, and when gods appeared on high they came upon the top of the building, not from a door in the front of a second story. The machine by which they were raised up was not hidden, but was itself erected only when needed. The ekkyklema was

little more than a flat wagon rolled out from the scene-building. The scene-building itself was a simple structure which could be easily removed. There was in the orchestra no altar. The thymele was not an altar nor a raised step for the actors. The word *θυμέλη* is not connected with *θύω*, but probably with the root *θε* of *τίθημι*, and denotes simply the foundation, or, in the case of the theatre, the orchestra. The Hellenistic theatre was built primarily for the presentation of the new comedy; hence it differs from the earlier theatre in many particulars.

History of the Temple at Delphi.—At the sessions of the French School, February 12, March 11, March 25, 1896, Th. Homolle presented papers on the history of the temple at Delphi. These papers, somewhat revised in the light of articles by Pomtow and recent discoveries, appear in *B.C.H.* XX, pp. 641-654, 677-701, 702-732. The first article opens with a summary presentation of the testimony of ancient writers as to the various temples at Delphi, and the additional conjectures of Köhler and Dittenberger. The discoveries have confirmed and completed these statements. The conclusions of Pomtow, though reached by a different method, agree with those drawn from the excavations, except in some details. Though Delphi was inhabited from the time of the Mycenaean civilization, no trace has been found of any temple before the sixth century, in spite of a most careful examination of the foundations. Nor are early remains common in the part of the terrace between the temple and the polygonal wall on the east. Only two walls have been found which are anterior to the polygonal wall, and neither of these can have belonged to the old temple. Nor are there any traces of the fire which destroyed the old temple, for the small deposits of ashes are evidently remains of sacrifices. It is clear that to a very destructive fire succeeded a most complete clearing of the site, in order to lay the foundations of the new temple. The old building must have been near the level of the foundations of the polygonal wall; but that wall and the present site of the temple are inseparably connected, and belong to the work which was begun after the fire of 548 B.C. The temple of the sixth century (*παλαιὸς νεὸς*) is mentioned by Herodotus in terms which imply that the Alcmeonidae undertook a new work. In fact, they planned to give the temple the most imposing situation possible, and hence the preparation of the great terrace, such as Cimon afterwards built on the Acropolis. This work was completed before the end of the sixth century, since the Athenian portico rests against the polygonal wall. This edifice had the same size and plan as that known to us. Indeed, the continuity is so complete that the destruction in the fourth century was forgotten. Some fragments of architecture from this building have been found in foundations of the present temple and elsewhere in the *temenos*, particularly in embankments of the fourth century. These consist of parts of a column and a capital of *poros*; fragments of the architrave of Parian marble and of *poros*; a triglyph of Parian marble, possibly a metope of *poros*; many pieces of the Parian marble cornice; two lion's heads, evidently gargoyles; and a block from the corner of the tympanum, which

shows the angle of inclination. There have also been found in an embankment of the fourth century a number of fragments of sculpture, of marble and *poros*, which seem to belong to the decoration of this temple. Some of these pieces are in the round, but with the back left rough, and showing marks of attachment; others are in high relief. All are larger than life. The style is that of the end of the sixth century. As one façade of the temple was of marble and the other of *poros*, the difference of material favors the assignment to the pediments. All show signs of violent destruction, but little weathering. From the calmness of the figures in marble, it seems probable that they belonged to a gathering of the gods. The *poros* fragments may have belonged to a Gigantomachia, but this is very uncertain. A flying Nike, like the one from Delos, but much better in style, seems to have been one of the acroteria. Many fragments of the roofing tiles of marble have been discovered. The size of the triglyph and metope gives a clue to the intercolumniation; and from this the probable dimensions at the architrave are 22.34 m. broad by 57.52 m. long, which indicate a stylobate somewhat larger than that at Corinth, and agreeing very well with the foundations of the actual temple. The remains, especially the capitals, point to an earlier date than the old temple on the Acropolis, and perhaps to a different school, as the architect Spintharus was a Corinthian. The sculpture is later than that of the Treasury of Cnidus, but less free than that of the Treasury of the Athenians, and less vigorous than that of the old temple of Athena. It can scarcely be later than 520 B.C.

In the other two articles the history of the *καινὸς νεὸς* is traced in its construction, accidents, repairs, alterations, and ruin. The first paper discusses the date of its erection. The only direct mention of the accident which destroyed the temple of the Alcmeonidae has been found in a decree of the Delphians in favor of the Thuriens; but the important word is mutilated, and the restoration is doubtful. The literature on the inscription is cited, a photograph of the two blocks of stone is given, and the document subjected to a detailed examination, with special reference to the readings and interpretations suggested by Pomtow. Homolle transcribes the decree as follows: 'Αγάθων Νεοτέλειος καὶ τοὶ ἀδελφεοὶ Θουρίους περὶ τῆς προμαντηρίας ἐπανενεώσαντο, ἐπεὶ ὁ ναὸς κατ . . νθη . καὶ ἔδοξε Δελφοῖς Θουρίους ἀποδομεν τὴν προμαντηρίαν προαλιωτῶν ἰόντων Ταραντίνον κλειο[. . Δ . . . ο]. εἰμεν Θουρίους. ἀρχοντας Θηβαγόρα, βουλευόντων Γνωσία, Ἀρισταγόρα, Ἀλ[κιμ]άχον. A comparison of the names leads to the conclusion that this inscription belongs about 325 B.C. The word κατ . . νθη does not refer to the destruction of the temple, but to its renewal, and may be restored κατηνύθη. The document, therefore, is testimony to the rebuilding rather than the destruction of the temple. Unpublished inscriptions show that the temple was practically completed in the fourth century, and that the statement that it was finished in the reign of Nero must refer to some repairs. The only evidence as to the destruction of the old temple must be sought in the ruins. There are no beds of ashes in Delphi, particularly in the parts filled up during the fourth century, sufficient to represent the

remains of a large temple. It is, therefore, probable that the old temple was overthrown by an earthquake. This conclusion is borne out by the state of the fragments of sculpture and columns, which are badly broken, but show an uninjured surface without trace of smoke or corrosion. The necessity for rebuilding is also more easily understood if the façades had been thrown down, for fire would scarcely have damaged the stone so completely as to prevent its use again. The foundations show no trace of fire, but at the west end of the south side and at the west façade they show evidences of hasty construction in the miscellaneous materials which have been used, though elsewhere the stones are carefully laid and homogeneous. The reason seems to be that during the reconstruction further earthquakes made necessary a rebuilding and strengthening of this portion of the terrace, and for this purpose the remains of the old temple furnished convenient and cheap material. The impieties of Phalaecus were checked by earthquakes not later than 347 B.C., according to Diod. Sic. XVI, 56. It was just after 346 B.C. that there is renewed evidence of activity at Delphi. Therefore we may conclude that there were two earthquakes in the fourth century, of which the first destroyed the temple of the Alcmeonidae, and the second damaged the unfinished new building. At the north of the temple also are evidences of an earthquake which hurled down huge rocks from the Phædriadae, though these were afterwards hidden behind a wall of fourth-century style. The destruction must have occurred between 415 B.C. (date of the Ion) and 371 B.C., when an appeal for contributions was made to the congress at Sparta, and probably near the latter date. We hear that two years before the battle of Leuctra, the Peloponnesus and Delos were shaken by a severe earthquake; and this may have reached Delphi, though there is no mention of that place. The accounts of the *ναοροί*, which are carefully dated, show that the rebuilding began in 361 B.C., and was not completed in 343 B.C. The delay in beginning seems due to difficulty in procuring money. The accounts of the *ναοροί* contain the contributions, either in the form of first-fruits from families and individuals, or from cities, probably in payment of the subscription of 371 B.C. The article gives lists of these donors. In the year 355 B.C. the total receipts seem to have been about nineteen thousand Delphic drachmas. From other inscriptions which are published and discussed, the conclusion is reached that the work was finished about 330-329 B.C.; and in connection with its completion occurred probably the dedication of the tripod by the Athenians under the leadership of Lycurgus. The conclusion may be given as follows:

- In 373-372 B.C. Old temple destroyed by an earthquake.
 " 371 " Subscription for new temple opened.
 " 369 " Dionysius of Syracuse had sent his contribution.
 " 351-347 " Temple already completed as far as the epistyle.
 " 347 " New earthquake, and hasty rebuilding of southwest foundations.
 " 339 " Temple finished, but not dedicated. Rededication of the offerings of the Athenians after Plataea.
 " 330-329 " Temple probably finally brought to completion.

The last paper discusses the reconstruction of the temple in the imperial period and its further history. During the third and second centuries B.C., Delphi enjoyed great prosperity; and it seems clear that the temple would not have been left unfinished at that time, even if there were any proof that it had not been completed in the fourth century. During the invasion of the Gauls, the temple was neither destroyed nor pillaged, but it seems to have suffered during an incursion of the Thracians, and in 83 B.C. was burned, though the large amount of fourth-century work which remained in the later structure shows that the destruction cannot have been as complete as Pomtow supposed. The decline of the oracle had begun during the Peloponnesian War; and during the first century, Greece was too poor and the Romans too sceptical to do anything to restore the reputation of the temple. Not only was the oracle silent, but during this period decrees are lacking; and after the thirteenth priestess the emancipation records become fewer. After the battle of Philippi, Antonius promised aid in repairing the temple, but nothing seems to have been accomplished. Augustus, who revived the Amphictyonic Council, probably did something for the temple; but Strabo testifies to the poverty of the place, and the poor monuments erected to the emperors confirm his statement. About the beginning of our era there are signs of renewed prosperity. The Athenians resumed their embassies, and the number of emancipations again increases. An inscription in honor of Nero (54 A.D.) seems at least to be cut on a stone not used before. Other inscriptions in honor of this emperor confirm the belief that great hopes were cherished by the Delphians from his fondness for Greece; but there is no good evidence of any extensive alterations in the temple at this time, though some repairs may have been made, nor is there any reason to doubt the statement of Dio Cassius as to the change in Nero's attitude toward the oracle. An official document attributes the repair of the temple to Domitian, seventeen years after Nero's visit. Under the Flavian emperors there are many proofs of renewed interest in Delphi; and in support of this several inscriptions of this period are published, including the dedication of the temple as restored from twenty-three fragments, found, for the most part, before the east façade of the temple, showing that the work was done in the year 84 A.D. To judge by the remains of the temple, the word *refecit* refers merely to the repairs made necessary by the long period of neglect and violence, and was scarcely more than the replacing of damaged portions of the structure. It is an interesting mark of the revival of paganism that the renewed interest in the Delphic sanctuary begins under the persecutors Nero and Domitian. This continued under Nerva, Trajan, Hadrian, and the Antonines. Seven inscriptions are published, and many more are mentioned to show the interest of the emperors and other Romans in the place; and further proof is furnished by the number of new buildings and repairs carried out during this period. The imperial coins of Delphi show frequently the temple of Apollo, but in a type which cannot be regarded as an accurate reproduction. The sculptures in the pediments have wholly disappeared, and, in any case, could not

have been the work of Praxias and Androstenes at the end of the fifth century. The differences between the imperial temple and that of the fourth century cannot be exactly determined, but did not affect any essential characteristic. The Delphians testified their loyalty to Severus and his sons by decrees, but after this time the final decline sets in. Only a few wretched monuments belong to this period, and they contain no mention of the temple. Three later dedications to emperors are published. Constantine and Theodosius plundered the sanctuary to enrich Constantinople, and the triumph of Christianity completed the downfall of the oracle. Julian's endeavors were no more successful at Delphi than elsewhere. In the fifth century the ancient marbles were already used to decorate Christian churches. The temple was not saved by dedication as a church, but was used as a quarry, and most thoroughly destroyed. There is scarcely a piece of the architectural decoration recognizable. Of the Christian and Byzantine remains at Delphi, the most ancient go back to the fifth and sixth centuries of our era. One inscription of the sixth century mentions a bishop Pantamianos, but his see is not certainly Delphi; and the poverty of the inhabitants seems to have prevented the place from obtaining any importance. In the ninth and tenth centuries the name becomes *Καστρί*, and in the eleventh century the buildings were plundered for the benefit of the new monastery of St. Luke in Phocis.

The Treasury of the Siphnians or Cnidians at Delphi.—On January 15, 1896, Th. Homolle presented to the French School at Athens a discussion of the building previously called the Treasury of Siphnus, which he now believes to be the Treasury of Cnidus. The plan (*B.C.H.* 1894, pl. ix) shows the situation at the first turn of the Sacred Way. The steep ascent made extensive foundations necessary, and these are of Parnassus limestone, and where they are visible of marble. The building (6.28 m. × 8.90 m.) has the form of a temple *in antis*, with the entrance in the west front, which alone is accessible. It is built of Parian or Naxian marble of unequal quality and color. Four fragments of the *steps* have been found bearing part of the dedicatory inscription in archaic characters. Of the two *columns* a shaft and a base have been found, showing that the order was Ionic, and the probable height, including capital and base, 4.80 m. Of the *antae* some fragments have been found bearing inscriptions, of which only two are given *in extenso*, a proxeny voted Ampelion of Cnidus, and a group of Delphian decrees in honor of Sostratus of Cnidus, the architect of the Pharos of Alexandria, and two other Cnidians. The *frieze* has been described in *B.C.H.* XVIII, 189 ff.; XIX, 534 ff. This description needs some modifications in view of later discoveries. The south *frieze* shows two scenes of abduction, and therefore represents not the race of Oenomaüs and Pelops, but the rape of the Leucippides. In the centre was an altar, and the composition was symmetrical, with four chariots, preceded and followed by horsemen, or with one chariot in the centre, and two others at the sides. The combat on the east *frieze* is taken from *Il.* XVII and represents the struggle for the body of Euphorbus; Menelaus is confronted by Hector

and Aeneas. Careful examination of the marble has shown that the inscription supposed to indicate the presence of Patroclus does not exist. The intervention of the gods furnishes the basis for the second scene, which takes place on Olympus. The facsimile of the artist's signature on the shield of a giant is given. The frieze seems to have rested directly on the architrave. The moulding above the frieze is beautifully decorated by a row of alternate lotus blossoms and palmettes, which recall the ornaments of the so-called Ionian vases. In addition to the central figures in the pediments, which are still part of the tympanum, and the two figures in the corners, there have been found many fragments which could find a place in the gable. They appear to have been made for attachment to the tympanum, and the effect is that of reliefs. The *simā* shows ornamentation in lotus blossoms and palmettes, and at intervals gargoyles in the form of five lion's heads. The *acroteria* were draped figures, running or flying, but only a base with some drapery has been found. The *polychromy* played an important part in the decoration of the building, and full details of the use of colors is given. Many blocks of marble belonging to the walls have been found, containing Delphian decrees in honor of benefactors from Greece, Egypt, and Asia. Some fragments of the casing of the door have also been found. The Caryatids, in spite of their evident relationship to the sculptures of this Treasury, were not part of the actual building, though they must have been used in immediate connection with it.

The building seemed to agree entirely with the testimony of Pausanias and Herodotus as to the Treasury of the Siphnians, in spite of the difficulties of the Argive sculptor and Dorian legends represented. The new discoveries make it more probable that the building was erected by the Cnidians. (1) The five decrees on the *antae* are all in honor of Cnidians. The dedication is in an archaic alphabet containing *c* and *o* for *o* and *ω*, a peculiarity of Melos and Cnidus. The ancient legends of the Cnidians point to connections with Delphi, and their bounty to the oracle is attested by Pausanias and many discoveries, so that it is natural they should enjoy the Promanteia indicated by the fragmentary inscription on the door. Cnidus seems to have sunk into insignificance in the second century B.C., and the Treasury may have been taken from her, as no Cnidians appear in the decrees on the walls of the *cella*. Paus. X, 11 seems to hint at a building of the Cnidians near the Treasury of Sicyon, and such a building can only have been a Treasury. The unexplained disappearance of the Treasury of the Siphnians is not a sufficient argument against an identification supported by these proofs.

As to the date the material points to a date about 548 B.C., probably shortly after the use of Parian marble by the Alcmeonidae for the façade of the new temple. Our scanty knowledge of the history of Cnidus leads to a similar conclusion. Herod. I, 174 says that the Cnidians yielded to Hargagus in 544 B.C. on the advice of the oracle. This submission proved highly profitable, and the Treasury erected during the last half of the sixth century may well have been a mark of their piety and pride. The style of

the monument points to the same period. The inscription and the sculptures show the closest analogy with the coins of Cnidus struck between 550 and 500, and an analysis of the architectural details and the style of the sculptures shows that the nearest analogies are found in works of this time. These points are discussed at some length and with extensive citations of examples.

An examination of the subjects chosen for representation shows an admixture of oriental (though in small quantities) with Greek and especially Peloponnesian and Argive elements, which is very natural in a city like Cnidus, which was a colony of Argos and Lacedaemon. The figure of Cybele in the Gigantomachia is characteristic of the Asiatic representations, and Aeolus has a legendary connection with Cnidus. Heracles, who appears in the Gigantomachia, the west frieze, and the east pediment, and the Dioscuri are of course Dorian, and in the combat over Euphorbus or Sarpedon Menelaus holds the prominent place. The signature of the artist contains the characteristic Argive Λ , but shows in another character a resemblance to the Rhodian alphabet, and thus also has a composite nature. Not merely the subject but the inscription recalls the Euphorbus platter from Camirus. At present the signature can only be assigned to Argos. The origin of the platter is still under discussion. The vase of the Acropolis published by Hartwig in *B.C.H.* XX, p. 372 shows also a mixture of Attic and Dorian influence.

The Treasury of the Cnidians is an Argive work by the nationality of the artist, an Asiatic or Ionian work by the nationality of its donors, whose taste the sculptor can satisfy because he has been trained in Asia or by an Asiatic master. There is here a lesson in method, for it may be doubted whether it is allowable to speak of a Dorian or Ionian art, when the same forms are found in Asia Minor, Greece, the islands, and Sicily, and whether schools can be distinguished with clearly defined characteristics in view of the small number of signed works of known origin, the absence of special marks in works of definite artist and region, and above all the small evidence furnished by the nationality of the places where the sculptor has worked, and the influences under which he has been trained. (*B.C.H.* XX, pp. 581-602.)

The Theatre at Delos. — In *B.C.H.* XX, pp. 563-580, Dörpfeld replies to the article of J. Chamonard (*ib.* p. 256), who had maintained that the theatre of Delos furnished valuable proof for the existence of a stage, not only in the extant remains, but also in the inscriptions. Dörpfeld had already used these remains to prove his own theory, and now re-examines the evidence. The account of the remains given by Chamonard is generally very clear and exact. The height of the proscenium is rather 2.81 m. = c. 3 m. than 2.53 m. as given by Chamonard. The intercolumniations of the proscenium must have been filled with wooden panels ($\pi\acute{\iota}\nu\alpha\kappa\epsilon\varsigma$) rather than marble slabs. The arrangements for the $\pi\acute{\iota}\nu\alpha\kappa\epsilon\varsigma$ are not identical. In the second and twelfth intercolumniations no $\pi\acute{\iota}\nu\alpha\kappa\epsilon\varsigma$ can be traced, so that here seem to be indications of possible side-doors. In the fourth and tenth

spaces the *πίνακες* seem to have been permanent. The proscenium at Delos then could represent three houses, one in the centre with four panels and a door, and one at each side of two panels and a door. Chamonard claims that the *podium* above this proscenium was the place where the actors played. Without answering all the objections, many of which are discussed in Dörpfeld and Reisch, *Griech. Theat.* ch. viii, a few points are examined in detail. (1) The proscenium is too low to be a background. Ten or twelve feet is not enough for an important house, or a grand palace. Dörpfeld says that the stone proscenial of the third century only represented ordinary houses. In the early time such houses were not more than ten or twelve feet high. In any case ancient and modern decorators give façades less than their real height. As the proscenium is carried round the other three sides of the *scena* as a true portico, it could well represent a house or entrance on the fourth side. (2) The proscenium at Delos has but one door, those at Megalopolis and Thespiae have none. Dörpfeld holds it as certain that there was a door at Megalopolis and Thespiae, and that there were probably three at Delos. At Priene three doors have been found. (3) The doors were too low to admit the passage of the actors. Even at the smallest theatre, Oropus, the door is 2 m. high; at Delos it is 2.20 m., quite enough for an actor in cothurnus and mask. (4) The roof of the proscenium was not adapted to divine apparitions. We do not know exactly how the divine appearances were managed, but it is clear that there was a place where the gods could move, and this place must have had some decoration. This gives, on Chamonard's theory, three lines of decoration above one another, which in Dörpfeld's plan is reduced to two, and this agrees with the double *scena*, and double parascenium mentioned in the inscriptions.

Dörpfeld then examines the arguments of Chamonard based on the theatres of Asia Minor. This portion of his article has been expanded in *Athen. Mith.* XXII, pp. 439 ff., and may be omitted here. In conclusion he considers certain arguments drawn from the inscriptions. *Λογέιον* in inscriptions of the third and second centuries means the roof of the proscenium. The very rarity of the word shows it was not a part of the theatre like orchestra and *scena*. The wooden staircase mentioned was probably inside the *scena*; nothing shows it led from the orchestra to the top of the proscenium. The marble parascenium in an inscription of 269 A.C. must refer to an older *scena*, as the present one has no parascenium, and a marble structure could not be put on the angles of a colonnade. To sum up: The plan of the *scena*, and particularly the prolongation of the colonnade on the four sides of the *scena*—the division of the proscenium by *πίνακες* into three compartments which could represent three houses—finally the mention in the inscriptions of an upper and lower decoration—are so many proofs that at Delos, as in general in Greek theatres, actors and chorus played together in the orchestra.

The Greek Theatre of Vitruvius.—In *Athen. Mith.* XXII, pp. 439-462, with pl. x, W. Dörpfeld discusses Vitruvius's account of the

Greek theatre. That Vitruvius is not speaking of the ancient theatre, but of those of his own time, is clear from his rules for building, and the general view has been that his description applies to the later theatres in Greece, belonging to the Hellenistic period. The belief in this view led Dörpfeld and Reisch to assume an error in Vitruvius, since the Greek theatre at no time had a raised stage. This was felt to be a weak point in the argument, and further consideration has led Dörpfeld to believe that the assumption of an error by Vitruvius is unnecessary. Does Vitruvius mean to give rules for a Hellenistic theatre like that at Epidaurus, when such theatres were probably no longer built in Greece, and seem never to have been built in Rome? Or is there another sort of theatre which Vitruvius could describe as *theatrum Graecorum*? There is; it is the theatre of Asia Minor. These theatres have not yet been sufficiently excavated, but their general type is clear, and may be seen from the plan of Termessus (pl. x). At first glance they seem to resemble a Roman theatre, but they depart widely in details from the rules of Vitruvius for Roman, while closely agreeing with his rules for Greek theatres. The characteristic features of these theatres are: (1) The seats uniformly form an arc greater than a semicircle; (2) the orchestra is regularly greater than a semicircle; (3) the parodos is an open passage, not vaulted as in the Roman theatres; (4) the stage is never at the diameter of the orchestra, but always some distance back; (5) the height of the stage is much more than the 5 feet given by Vitruvius to the Roman stage, varying from 2.30 m. to 3 m., i. e. from 8 feet to 10 feet; (6) the depth varies greatly, sometimes agreeing with the narrow stage of Vitruvius, and sometimes approaching the broad Roman stage. In all these points the general agreement with the *theatrum Graecorum* is clear, and this becomes still more evident by comparison of a special theatre, e. g. Termessus, with the detailed account of Vitruvius. It is to be noted that Vitruvius says that in the Roman theatre all performances were on the stage, the orchestra being reserved for seats, while in his Greek theatre the *scenici* were on the stage, the *thymelici*, i. e. dancers, pantomimists, etc., in the orchestra. For the Asiatic theatres this has never been doubted. The argument becomes conclusive when it is shown that the Asiatic theatre existed in Rome alongside of the *theatrum Latinum*. This is proved by the passage relating to the *ludi saeculares*: "*Ludos . . . Latinos in theatro ligneo quod est ad Tiberim h. II; Graecos thymelicos in theatro Pompeio h. III; Graecos asticos in theatro quod est in circo Flaminio h. I.*" The first theatre is of course the Roman type. The theatre of Pompey was copied from that at Mitylene (Plut. *Pomp.* 42), and as it was used for performances in the orchestra it was either of the Hellenistic or Asiatic type, more probably the latter. It seems probable that it was this theatre which Vitruvius had in mind. The *ludi Graeci astici* are most easily understood to be comedies and tragedies, which would be performed according to Greek custom in the circular orchestra, and for this the stageless Flaminian circus, across one end of which a *σκηνή* could be erected, furnished the best place.

Certain objections may be brought against this view. (a) The dimen-

sions of the stage do not agree exactly, as in most theatres the stage is somewhat lower and broader than the rules allow. Such variations occur also in the case of the low Roman stage and the Hellenistic proscenium. (b) This does not agree with Dörpfeld's old view of *finitio proscenii* and *scaenae frons*, but a comparative examination of the two Vitruvian theatres shows that these terms are best explained as the front and back of the Asiatic stage, the latter including the columns which decorated the back of the stage. (c) If the top of the Hellenistic proscenium could not serve as a stage, is not the Asiatic stage too high and small? As to the height, in many Asiatic theatres the lowest row of seats was but little below the stage level; in the others, the lower rows can only have been good seats when performances were given in the orchestra. As to breadth, the Asiatic theatres being larger would have stages deeper than the Hellenistic proscenia even according to the rules of Vitruvius, and in fact the depth is usually greater than is prescribed by these rules. None is less than 3.50 m. deep. (d) Can Vitruvius call this building *theatrum Graecorum*? As the theatre in Rome which differed from the *theatrum Latinum* and was used for *ludi Graeci* was copied from a Greek theatre, the name is appropriate. He had no need to speak of the Greek theatre without a stage, as he is concerned only with the buildings familiar in Rome.

It remains to consider the origin of the Asiatic type. This cannot yet be definitely settled as we do not know the exact time of the transformation from the old Greek or the Hellenistic form. It seems likely that the transformation was due to the loss of the chorus. In Italy this led to a small orchestra and broad stage, which was low in order that it might be visible from seats in the orchestra. In Asia Minor both parts were used for performances, but the high stage must have interfered with the view from the lowest seats. It was probably chosen for two reasons. Under a low stage there was no room available, unless a cellar was dug, and in particular there could be no door into the orchestra. With a high stage there was a waiting place for dancers, gladiators or even the beasts, but this space in new buildings is always left undecorated and in this differs from the proscenia of Hellenistic theatres. The other reason is the ease with which a Hellenistic proscenium could be altered into an Asiatic stage. The widening of the proscenium was effected either by building a new wall in the orchestra, or the *scaenae frons* was moved back, in which case the old columns of the proscenium served to support the stage. As the high stage made the lower seats undesirable, they were removed, or in new buildings the seats were not carried down to the level of the orchestra. This made it possible to shut off the *conistra* by a barrier, which would be needed in the gladiatorial shows and wild beasts' fights which took place in the orchestra of Asiatic theatres. This development is made clear by a diagram (fig. 3). Vitruvius's testimony therefore cannot be used for the reconstruction of either the old Attic or the Hellenistic theatre, and this removes the last ground for believing in a stage for the Greek theatre. No theatre in Greece ever had a stage except as a result of Roman rebuilding.

SCULPTURE

A Neglected Mycenaean Monument. — In *B.C.H.* XXI, pp. 5-15, pl. i, S. Reinach calls attention to a neglected work of Mycenaean art, found near Amyclae and published by Caylus (*Recueil*, II, pl. ii). It is gold, alloyed with silver, about 6 cm. long and 8 cm. high, and represents a stag *couchant*, with long horns which meet at the tips, forming an ellipse. The likeness to the pair of gold stags found by Schliemann at Mycenae is striking. Though Caylus knew nothing of Mycenaean art, he recognized that this work was not Greek. His first thought was that it resembled the Scythian antiquities, and later in considering the question of Egyptian origin, he decides it may have been made in another country under Egyptian influence. His final conclusion is that it may be a Persian work. He thus anticipated the three views as to the foreign origin of Mycenaean art, of course substituting Persian for the Assyrian and Babylonian art of which he was ignorant. A gold stag very like this was published by Nicholas Witsen in 1692 in his book *Nord-en-Oost Tartarye*. Many other analogous specimens have been found in the Caucasus and Crimea, due undoubtedly to the Ionian influence, which was the heir of the Mycenaean and the parent of the barbarian art. This stag from Amyclae after the death of Caylus passed in some way to the Musée Charles X, and was inventoried among the Persian objects. The body was stolen in 1830, but the head is still in the Louvre, and is published by Perrot and Chipiez, V, p. 881, fig. 534, though with much hesitation, as a work of Persian art.

Metopes of the Treasury of Sicyon at Delphi. — At the meeting of the French School at Athens, February 26, 1896, Th. Homolle read a paper on the Metopes of the Treasury of Sicyon, which is reported in *B.C.H.* XX, pp. 657-675, and illustrated by pls. x-xi, and a cut in the text. Pausanias mentions this Treasury first after entering the eastern gate and the name has been given to the first building reached, though there are no other grounds for the identification, for the Sicyon stone is used in other buildings, and the painted inscriptions, like those on the Treasury of Cnidus, are in the Delphic alphabet. The building is rectangular, in the form of an archaic Doric temple *in antis*, 8.43 m. × 6.35 m., and with the portico toward the east. The foundations on the east and south are made up of remains of older buildings. Six sculptured slabs have been found, five of which are described in detail and illustrated. One represents a wild boar advancing with lowered head, and shows traces of a painted inscription [H] YΞ KA [AYΔONIOΞ]. Another shows a bull carrying a woman on his back. The third is very fragmentary, but seems to have shown a ram carrying a draped figure. The fourth shows three men marching toward the right, and probably a fourth figure has disappeared. All wear the same costume, and are in the same position. Each carries two lances over the left shoulder, and a third horizontally in the right hand. In the background is a herd of cattle, represented as moving three abreast, the heads appearing in front of each warrior. At the left of the first and second figures are painted KAΞΤΟΡ

and ΙΔΑΞ. The fifth relief represents the bow and beak of a ship, with the cordage and other details carefully worked out. On the deck are two figures, playing on musical instruments. At the left of this is a horseman *en face*. There are traces of a similar figure at the right. Between the heads of the musicians is written ΟΡΦΑΞ, and at the left are traces of other letters. The sixth and seventh slabs are very fragmentary, but one seems to have had a representation of another ship. The slabs are certainly metopes, and therefore each contains a single scene. Number 4 is evidently the return of the Dioscuri and Apharidae with the Arcadian booty, and No. 5 belongs in the Argonautic story, representing Orpheus and, probably, the Dioscuri. The boar belongs to a scene from the Calydonian hunt, No. 2 shows the rape of Europa, and No. 3 seems to have represented Helle on the ram, as the folds seem those of a woman's garment. The Dioscuri were worshipped at Sicyon, and the lance of Meleager was preserved in the temple of Apollo in the same city. The Thessalian, Cretan, and Boeotian legends also are not inexplicable, especially in view of the policy of Cleisthenes, in breaking the connections with Argos, and joining Sicyon to Northern Greece. The time about 570 B.C. seems to show historical conditions most appropriate for the building of this Treasury. The place of the discoveries seems to show that the metopes had been employed in the building of the embankment, when the late Treasury was erected, and to this they doubtless owe the good preservation of their color. This latter condition seems to show that they had been completed but a short time before the destruction of the building. For comparison with these sculptures we have the long series of works in *poros* from Selinus, Assos, Athens, Olympia, and Delphi. The material went out of use as the marble technique became more general, and the date of the change is about 575-560 B.C. This is about the date of the Moschophoros of Athens, which shows in marble the influence of the *poros* style. The influence of the marble is plainly seen in the later sculptures from Selinus (temple E), and even in the pediment of the Megarian Treasury at Olympia, and in the *poros* sculptures from the pediment of the great temple at Delphi. The period of sculpture in soft stone appears to extend from about 650-550 B.C., and the temples of Selinus give us a fourfold series of metopes, in an undisputed order of succession, and limited between 628 and 409 B.C. The sculptures of the Sicyonians at Delphi seem to belong between those of temple C and temple F of Selinus, and rather nearer the former than the latter. This conclusion is worked out at considerable length and with a careful comparison of details. Therefore from historical inductions, and from the style of architecture and sculpture, we are led to a point between 570 and 560 B.C. as the probable time for the execution of these works. As to the "school" in which these works belong, it is of course probable that they are the work of a native artist, but they can scarcely be used to judge of the work of a Canachus or Calamis, nor are they differentiated from other works in soft stone by such striking peculiarities as to enable us to form a notion of the specific characteristics of the Sicyonian art. In all the contemporary works in this material, the resemblances in style and types produce a general

effect of uniformity, rather than of a number of sharply differentiated local schools.

Bronze Apollo from Delphi.—On January 15, 1896, P. Perdrizet presented to the *Inst. de Corr. Hell.* photographs of the bronze statue found at Delphi in July, 1894 (*B.C.H.* XVIII, p. 195). It is an "Apollo" of the second style, about 0.40 m. high, lacking the base, left arm, and right hand. In spite of the damage wrought by oxidization, the monument is important in the history of archaic art. It seems slightly older than the "Apollo" of Naxos in Berlin (*Arch. Zeit.* 1879, Taf. vii). Unlike the other archaic male statues it has a necklace and bulla, furthermore the feet are in sandals, and the arrangement of the hair is unusually complicated. In view of these facts, the figure must represent Apollo *ἱκηβόλος*. The school cannot be determined, as there is nothing conclusively in favor of either Peloponnesus or Ionia. (*B.C.H.* XX, pp. 602-604.)

Bronze Statuette from Delphi.—In *B.C.H.* XXI, pp. 169-183, pls. x-xi, P. Perdrizet publishes a bronze statuette found in June, 1895, at Delphi. It represents a young man, nude, beardless, the weight of the body resting on both feet, the arms at the sides. The whole figure is well preserved, and shows a freshness and intelligence rare in the earliest Greek work. There is also no trace of the archaic smile. The hair is arranged in plaits, which cover the ears and fall to the middle of the neck, in a fashion recalling some of the Egyptian types; the same fashion is found on the gold plates of Camirus, and on bronzes of the Acropolis. In a somewhat less marked form it occurs on the Apollo of Tenae. That this can be considered a mark of the "Rhodian school" Perdrizet vigorously denies, maintaining that in the case of such ancient bronzes the only clue to the origin is furnished by dedicatory inscriptions. Besides the hair, the girdle around the waist of an otherwise nude figure calls for attention. Such a girdle is found on statuettes of Olympia, and also on several bronzes from Delphi, of which five are illustrated in this article. On the metope of the Treasury of Sicyon, Polydeuces wears such a girdle under his chlamys. All these occurrences are on warriors, and thus the girdle appears to correspond to the Homeric *μῖτρη*. A similar girdle, evidently of metal, is around the waist of an archaic "Apollo," found at Delos (fig. 6), which has wrongly been called a torso of a woman in a close-fitting chiton, indicated by color. The holes at the waist of the Naxian colossus seem to show that it, too, wore such a girdle. This belt is also indicated on the wasp-waisted personages of Mycenaean art, both men and women. Two fragments of metal plating for such girdles seem to have been found in the Mycenaean tombs of the lower city, but ordinarily the Mycenaean belt seems to have been of leather. Only one later example is known in a bronze belt with leather lining from Euboea (Broendsted, *Bronzes of Siris*, pl. vii, p. 41). If this is a *μῖτρη*, the same explanation may be needed for a number of belt-plates, or bronze belts found in Italy, and even in the Tyrol. The Naxian Apollo, the Delian torso, the Sicyonian metope, and this statuette, all belong near the beginning of the sixth century, and show the survival of the ancient defensive armor. In a note Perdrizet

points out that the exceedingly good preservation of the *poros* sculptures of the Treasury of Sicyon can only be explained by a very early reconstruction of the first building, to which the sculptures belong. The second building was erected on a high base made of the remains of a small Doric building of *poros*. This second building is the one seen by Pausanias. The metopes could not have kept their sharp cutting and original surface had they been exposed for centuries to the climate of Delphi.

Vase in Form of a Double Head.—In the *Monuments Grecs*, Nos. 23-25, pp. 53-57, pls. xvi, xvii, 3 figs., M. Collignon publishes the terra-cotta vase in the Louvre, Inventory No. C. A. 518. Furtwängler's assertion (*Cosmopolis*, III, August 8, 1896, p. 579), that the vase is a forgery, is disproved. The clay appears to be Corinthian, but Cleomenes, who signs the vase, calls himself an Athenian. That an Athenian was working at Corinth explains at once the fact that he mentions his native city and certain peculiarities of the inscription. The vase is a work of sculpture rather than of ordinary pottery. One face of the double head is that of a bearded man, the other that of a woman. The mouth of the vase forms a sort of "polus." The female head resembles some of the marble works found among pre-Persian remains on the Acropolis of Athens. The male head has no such close analogies, but would naturally be assigned to the latter part of the sixth century B.C., which is doubtless the date of the vase. The male head wears a wreath of myrtle, the female a stephane. Possibly Dionysus and Cora are represented.

Pediment Sculptures of the Old Temple of Athena.—In *Athen. Mitth.* XXII, pp. 59-112, pls. iii-v, H. Schrader gives a very detailed account of the partial recovery of the Gigantomachia, which occupied the pediment of the old Athena temple on the Acropolis. The fragments were scattered all over the Acropolis, but their identification has not been hard, owing to the quality of the stone and the size of the figures. Four figures have been reconstructed. (1) Athena, in the costume of the archaic maidens of the Acropolis, but with the aegis over her left shoulder, advancing against a fallen giant. With her left hand she grasps the rod which supported the plume of his helmet, and with her right she prepares to thrust him through with the spear. (2) The opponent of Athena, who has fallen, the left leg stretched along the ground, the right sharply bent, as if in an attempt to rise. The upper part of the body is somewhat twisted, so as to bring the breast into full front, the left arm seems to have rested on the shield, and the right hung lifeless. (3) The figure in the right corner, a giant who has fallen on his right knee, his left leg stretched along the ground, with his right hand striving to lift himself, while his left seems to have held a shield over his head. (4) The corresponding figure from the left corner, also a fallen giant in strict symmetry with his comrade. He kneels on the left knee, the right leg outstretched, the left hand on the ground, while the right arm seems to have held the sword either to give or parry a final stroke. It is also possible to say that there were two other figures, also symmetrical, and represented in the act of striding forward,

as is clear from the fragments of feet, which are about all that give any clue.

The execution of the figures is unequal. Athena and her adversary are very carefully worked, even the backs smoothed and finished, while in other cases only the roughest modelling is given to the parts which were to be concealed. Color is not employed for the flesh, nor large masses of drapery, but is used for the border of Athena's garment, the aegis, the armor, and the hair showing a marked departure from the technique of the earlier *poros* sculptures.

The composition of the group seems to require Athena and her antagonist in the centre, next her on each side probably a god advancing against a partly defeated giant, and in the corners the fallen giants. These appear to fill the space required, though of two figures no fragments have yet been found. It is to be noticed that the giants are here naked, armed only with shield and helmet, not as on the Treasury of the Megarians at Olympia in full armor. This work also first shows us the youthful giant, in the figure in the left corner. The artist has not sacrificed the life of his scene to the desire for strict symmetry, as has been done in the Aeginetan sculptures, but has followed the old plan of breaking up the battle scene into individual contests. His work is more antique, but more effective, than the Aeginetan pediments. It is plainly intended to have the effect of a relief; so far as possible the legs are in profile, the bodies in full front.

The work is not so careful in detail, but treats the bodies rather as masses, though in general with accuracy; an exception is the exceedingly lifelike treatment of the feet. The style shows the same general characteristics which can be seen in the *poros* sculptures, and which distinguishes the early Attic from the Chian school. This work belongs in that period when the Attic artists had learned the marble technique, many fine points of style and some mannerisms from the Chians, without loss of their own love of general effect. It must be older than the votive statue of Euthydicus, or the boy's head, and according to the date assigned these, it will belong to the end or middle of the sixth century B.C.

Archaic Bronze Tripod from Athens.—In *B.C.H.* XX, pp. 401-422, pl. i and i bis, A. de Ridder discusses a bronze group found on the Acropolis at Athens, and already noticed in his *Catalogue des bronzes trouvés sur l'Acropole*, No. 760, fig. 269, pl. v, pp. 283-285. The group is composed of four figures, but of the one to the left, only the lower part remains. It stands on a flat base, which rests on an arch, broken at both sides. In the spaces between the ends of the base and the arch are protomae of Acheloüs. The back is hollow, and the whole was evidently attached to some backing. It is certainly a part of a tripod of a style found in numbers at Vulci, and also in Magna Graecia. The four personages in the group are moving toward the right, though the bodies, as usual in archaic reliefs, are not in profile. In front is a flute-player, then Heracles, a female figure, and Hermes, clearly marked by his winged shoes. In general all the figures wear the Ionic chiton and himation; Heracles also wears the lion's skin in the Ionic style,

but without using the head as a helmet. The figures are heavy and the limbs massive, and suggest an art with but little elegance, but with a good sense of proportion and life, and fond of robust forms. In the companion of Heracles it is necessary to recognize Athena, who is also represented without attributes on Chalcidian vases. She grasps the right wrist of Heracles in her left hand, a gesture denoting command. The group represents Heracles brought before Zeus, and somewhat shrinking from his glorification, as is the case in other representations of this scene. Hermes is frequently present at such scenes, and the flute-player is perhaps due to the resemblance of the group to marriage processions, or possibly merely to the need of a fourth figure to fill the space. The style of the relief seems to point to a date earlier than 550 B.C. Furtwängler (*Olympia*, IV, *die Bronzen*, p. 128) has referred to this group as certainly Etruscan, and it bears a decided resemblance to the tripods of Vulci, while the costume, subject, and general execution recall many works from Etruria. Nor is there reason to doubt some import of Etruscan manufacturers, at least in later times. A detailed examination shows that the resemblances are more or less superficial. The tripods of this form are borrowed by the Etruscans from Greek models. Achelöus is Oriental and Greek. The apotheosis of Heracles is a favorite in archaic Greek art. All the elements of this work may be paralleled in Ionian works. An important series of vases and coins shows the same heavy forms, and likewise the fondness for half-human beings, such as Centaurs and Sileni, and for strong heroes like Heracles, who is a national god, Ionian as well as Dorian. The centre for this art is the great commercial city of the early Greek world, famed especially for its bronzes. Chalcis also through its colony Cumae exerted a powerful influence on Campania, which was filled with its products, and hence it is that the tripods of Vulci and the Etruscan bronzes recall such Chalcidian works as this bronze of the Acropolis.

Statues of Women Clad in the Peplus.—L. Mariani, in the *B. Com. Roma*, 1897, pp. 169–195, discusses, with the aid of a number of cuts and plates, the inter-relation mainly of four statues of this type. These four statues are (1) one recently transferred to the museum of the Syllogos of Candia from its former position in the public garden to the east of the city of Canea. It lacks the arms, but has retained the original head. Under the peplus appears the Ionic chiton. The right foot projects from under the peplus, the left being entirely concealed by its folds; (2) a statue in the Boncampagni-Ludovisi collection at Rome (Helbig, *Guide*, etc., No. 883). The head does not belong to the trunk. No chiton is worn under the peplus, and the toes of the left foot appear slightly, as well as about half of the right foot. In other respects the Boncampagni statue is a close relative of that of Canea; (3) a statue from Rome in the Jacobsen collection at Copenhagen. It also lacks head and arms, and shows no trace of the chiton. The main difference between this statue and the other two is in the pose, the weight in the Copenhagen figure being inclined toward the right leg instead of resting on the left; (4) a statue of Athena in the Museo delle

Terme at Rome, lacking also head and arms, and wearing a scaly aegis over the peplus ([Marini-Vaglieri] *Guida del Museo delle Terme*, Sala, H 2, No. 6, invent. No. 720; Helbig, *Guide*, No. 1029). Mariani analyzes the costume of the Canea statue down to minute details, and compares carefully the others among themselves and with this, coming to the conclusion that the four statues display two groups marking each a separate step in the development of the general type. The Canea statue is apparently the latest of all. In the same group with it belongs the Boncampagni statue. Next to it, but in another group, comes the Copenhagen statue, and beside it the Athena of the Museo delle Terme. Furtwängler has already pointed out the resemblance between this statue and the figures from the temple of Zeus at Olympia (*Meisterwerke*, p. 682, etc.), and Mariani intends to speak further on this topic, after discussing other unpublished sculptures of a similar type.

Votive Reliefs in the Acropolis Museum.—The fragments of small terra-cotta votive tablets found in the soil of the Acropolis near the Parthenon, are of the same manufacture, evidently local, as the terra-cotta figures of the Acropolis Museum. The reliefs, which are carefully painted in gay colors, represent, in the majority of cases, Athena, in four types, three seated, one standing. They give the successive characters developed by the goddess, with the progress of the city she personified, from the Ergane, a girl in indoor dress, seated and spinning,—perhaps the character of the *catagusa* of Praxiteles (Plin. *N. H.* XXXIV),—to the victorious Polias and the Promachus, armed and mounting her chariot. They may have been dedicated, like the phiale of a later inscription, by the ergastinae on the completion of their task, but they give no evidence of a separate temple of Athena Ergane. The style, sometimes intentionally archaic, suggests a date of about 500 B.C. The aegis is of the older, cloak-like type, with simple, notched border. The snakes and scales were developed after the gorgoneion had been transferred from shield to aegis, in accordance with the Argive version of the Medusa story. A few fragments have other subjects, a lyre-player, perhaps Apollo, and a Heracles, still probably dedicated to Athena. (C. A. HUTTON, *J.H.S.* October, 1897, pp. 306-318; 10 cuts.)

Vase-painting of a Statue.—In *Röm. Mitth.* XII, pp. 318-322, E. Petersen publishes a drawing of a lost red-figured vase, representing a citizen saluting in passing a statue of Athena on top of a low column. This statue of Athena is evidently drawn from the statuette now in the Acropolis museum at Athens ('Εφ. 'Αρχ. 1887, πίν. 8), which once occupied the top of a column, and has been recognized as a connecting link between the sculptures of Olympia and the work of Phidias. The vase shows some slight divergencies from the statue in pose and costume, which are in general unessential, while the change in the direction of the head is required by the desire to have the goddess look toward her worshipper. The exact date of the statue is in dispute, but so far as can be judged from the drawing the vase seems rather later than the Persian invasion. In conclusion Petersen calls attention to the continuance of the custom of placing statues

on somewhat lofty columns, and suggests that the Thorn-Extractor of the Capitol was intended for such a position.

Bion of Miletus.—In *B.C.H.* XX, pp. 654-657, is a summary of a paper by P. Perdrizet on Bion of Miletus, read before the French School at Athens, February 12, 1896. The offering of Gelon, son of Deinomenes, for the victory of Himera consisted of a tripod of gold and a Nike, the work of Bion, son of Diodorus of Miletus. The artist is the eighth in the list of famous men of this name in Diog. Laert. IV, 58. Polemon, who is cited by Diogenes, must have mentioned him in his book against Adaeus, and probably in connection with this monument as he was familiar with Delphi. The silence of Pausanias is easily explained, as the golden tripod and Nike had probably been destroyed long before, and the front of the pedestal was covered by the stelae soldered to it in later times, when its conspicuous position made it the famous place for honorary decrees. Bion of Miletus is to be distinguished from the Bion of Clazomenae or Chios, who is tenth on the list of Diogenes, and was a contemporary of Hipponax. This artist must be half a century earlier than the Milesian. The latter was probably a worker in gold, and the offering of Gelon his only large work, so that it is natural that only through it should his name be known.

Bronze Statuette from Delphi.—At a session of the French School at Athens, March 25, 1896, P. Perdrizet exhibited a bronze statuette found at Delphi in August, 1895. It represents a nude young man, the hair arranged in the *corymbus*. The attitude shows vigorous, even violent action, though as the left hand and foot and the base are missing the interpretation is not easy. It is not a boxer or archer, but is very possibly from a group representing the struggle between Apollo and Heracles for the tripod, as the attitude is exactly that of the god in the monuments with this scene. The bronze is one of the most important monuments of the end of the archaic period, and may be compared with the statuette of the Acropolis (*B.C.H.* XVIII, pls. v-vii), but the Delphian figure is somewhat later, and recalls the figures of the best vases of the severe style. It belongs about the year 470 B.C., and is to be attributed to the Aeginetan school, or to an Athenian working under Aeginetan influence. (*B.C.H.* XX, pp. 701-702.)

The Tübingen Bronze Statuette.—In *B.C.H.* XXI, pp. 211-255, A. de Ridder discusses the bronze statuette at Tübingen, already restored by Hauser (*Jb. Arch. I.* 1887, pp. 95-107; 1895, pp. 182-203) as a hoplitodrome, and attributed to Critius and Nesiotes. De Ridder accepts the restoration with a shield and the interpretation in general, but differs as to the explanation of the attitude, and in connection with this point considers several problems connected with Greek agonistics. (I) The *motif* of the statuette. An examination of the vases with similar figures shows that none agree exactly with the bronze, and that they represent the contestants turning in the *δᾶλος*, or stopping at the finish. This figure is clearly not engaged in a race. The starting-point of the explanation must be the equal bending of the knees, and this gesture is found not only in charioteers, but in leapers. The statuette represents a hoplitodrome in the act of preparing to leap.

The vases show that the armed runners advanced by a series of leaps, for the heavy shield impeded regular motion. Hence the need of training in leaping. The attitude of the hoplitodrome is never that of the ordinary runner. In speaking of the *ex voto* of Epicharinus, which has been connected with this bronze, Pausanias (I, 23, 9) says Ἐπιχαρίνου . . . ὀπλιτοδρομεῖν ἀσκήσαντος, i. e. the figure was not on the course, but in some act of training, that is, he was probably practising the leap. (II) The leap itself is then discussed, and a number of vases, representing ephebi naked and without attributes, who appear to await a signal and somewhat resemble our bronze, are examined, and the attitudes of the figures are discussed and interpreted. (III) The ὤσπληγξ is next considered, and Hauser's explanation of two vases, which he believes represent the start. Both men carry the shield and stoop far forward, and seem to grasp a cord near the ground. The attitude is not the same, and the vases cannot represent the same scene. In one case the line is not on the ground, but partly raised, and passes between the legs of the man, which is impossible in a barrier to insure a fair start. The line on this vase must be a spear, in spite of the somewhat awkward position, though it is the same as that in which Eros carries a lance, and is found on other vases. A vase of Epictetus (fig. 4) shows a warrior picking up a lance. The other vase where the line seems to be on the ground shows not the starting-point, as the position is too constrained and unnatural, but rather a sort of calisthenic exercise. Of the other vases cited by Hauser, one represents a similar exercise, the other probably a kneeling hoplite, the absence of the spear being due to carelessness. (IV) The theory of Hauser that the races in armor covered four lengths of the stadium, of which the first and last were run with helmet and shield, and the second and third without the shield, which was left at the first turn and taken up at the third, is then examined. It rests entirely on a Munich vase, which de Ridder explains as ephebi exercising in the palaestra, and the same interpretation is given to other similar scenes which Hauser has cited. The conclusion is reached that the course for races in armor was the δίαυλος, as is indicated by the somewhat vague literary testimony. (V) The conclusion of the article is a discussion of the connection of the bronze with the votive offering of Epicharinus on the Acropolis. The analogies to the bronze have all been found on Attic vases, and there is nothing in the absence of greaves, or the shape of the helmet, which is inconsistent with the supposition that it is the work of an Athenian artist. The forms of the body and face recall a bronze of the Acropolis, already interpreted by de Ridder as a high jumper (Daremberg and Saglio, *Dict. Ant. s.v.* Halter, p. 6). The head of the Tübingen bronze also recalls the large bronze head of the Acropolis. The two Acropolis bronzes (Nos. 750 and 768) are "Attic Aeginetan," i. e. Attic, for the Aeginetan artists are also in close relations with the Athenian potters. The date of the statuette seems to be the very beginning of the fifth century, not later than the large head. We know too little of the work of Critius and Nesiotes to be sure that this statuette does not represent their style. We have on one side a signed work which

is lost, and on the other an anonymous work which is preserved, both dealing with the same subject and nearly contemporary in time. In any case the bronze is not a copy, but at most a very free imitation. The race in armor was a late addition to the games. It was adopted at Olympia in 520 B.C., and at Delphi in 500 B.C. It seems to have become popular at once, for it is found on vases which are nearly contemporary with the date of its introduction at Olympia.

Bronze Statuette from Girgenti.—In the *R. Arch.* XXXI, 1897, pp. 327–332, pls. xvii, xviii, F. Cumont publishes a bronze statuette from Girgenti representing an armed man. The armor consists of shield, helmet, breastplate, and greaves. The warrior also wears a belt and short tunic. In his raised right hand he holds a curved object which may possibly be a fragment of a bow, though this is not likely. The shield has nearly the form of the “Boeotian shield” familiar on coins and vases. The helmet has a high crest. The figure is too slender, and the artist has not represented the nude very successfully. The accessories are given with great care. The style of the work is archaic, but an exact date cannot be given. Perhaps this is a local imitation of Etruscan work, if it be not actually the work of an Etruscan artist. It is hard to decide this question, for the type of armed man (“Mars”) seems to have been borrowed by the Etruscans from Greece in the first place.

An Argive Bronze in the British Museum.—In the *Monuments Grecs*, Nos. 23–25 (1895–97), pp. 1–6, pl. xv, A. Jouvin publishes and discusses a bronze statuette in the British Museum which once served as the support of a circular mirror. The statuette represents a nude youth holding an oil bottle in his right hand. The right arm is extended obliquely toward the right. The left arm does not hang straight down, but is slightly bent at the elbow, so that the hand is held somewhat before and to the left of the body. The action is not graceful, but shows the artist's desire to represent natural movement. Comparison with other works shows that this statuette is a product of the Argive school about 450 B.C.

The East Pediment of the Temple of Zeus at Olympia.—The usual arrangement of the figures, with Pelops in the southern half and Oenomaüs in the northern half of the pediment, not only is contrary to the natural interpretation of the words of Pausanias (V, x, 6), but requires both these figures to turn their backs on the central figure, Zeus. Rather, Oenomaüs stood at his right, about to pour an offering on an altar which filled the vacant space on that side where the mantle of the god is closely drawn in. Toward this altar Zeus inclines his head. Sterope, behind her husband and closer to the background, held in her missing right hand the phiale which she was about to pass to him. This is the moment of “preparation” which Pausanias says was represented. In contrast to the calmness of the king and queen, Pelops and Hippodamia, on the other side, are turned slightly away from each other and look down, in troubled thought. Their confederate Myrtilus, who sat in front of the horses of Oenomaüs, is, of the three sitting figures, neither the thoughtful old man, for whom there is not

room behind Sterope, nor the unconcerned youth, but the man, in uneasy attitude leaning on his goad, who looks anxiously at the central group. The two kneeling men, who fit the space behind the horses and who held reins, are the two grooms who attended the king's horses. On the other side, the old man, who held a goad and reins, is Cillas, the charioteer of Pelops, and sits behind the horses. The kneeling girl, whose dress Pausanias mistook for the charioteer's tunic, is Hippodamia's servant, kneeling before her mistress and preparing her for the race. Of the remaining figures, those reclining in the corners are not river gods, — a Hellenistic conception, — but represent the public as interested spectators; and the sitting youth, to be placed behind Cillas, turning toward one of these spectators, is Pelops's servant.

Although this arrangement is the result only of study of the figures themselves, it is surprisingly confirmed by the records of the places where the fragments were found. Of the five groups, all near the front of the temple in which they occurred, those to the south of the middle contained no pieces here assigned to the northern half of the pediment and those to the north consisted almost entirely of such pieces.

The nice balance, not more of physical mass and line than of thought and emotion, the skilful blending of the separate groups, as by the upward look of Myrtilus and the action of the slave before her mistress, place the composition far in advance of the Aeginetan groups, with their conventional symmetry, and make it a worthy forerunner of the Parthenon pediments. (K. WERNICKE, *Jb. Arch. I.* 1897, pp. 169-194; 14 cuts.)

So-called Sappho Head. — In 1889 M. Héron de Villefosse bought in Rome for the Louvre a female head in marble of the so-called Sappho type, which was said to come from Cagli near Urbino. This head forms the subject of an article by E. Pottier in *B.C.H.* XX, pp. 445-458, pls. xvii, xviii. The discussion is divided into three parts. (I) The date. The head bears a close resemblance to the figure in the Parthenon frieze behind Aphrodite, commonly called Peitho. A detailed comparison of the two heads is made with the aid of pl. xviii, and the striking likeness in general and the differences in detail carefully pointed out. A further comparison of the two heads with the Sappho Albani shows an accentuation of these differences. The Louvre head still shows traces of archaic style. It may be said to represent the daughter or granddaughter of the bust from the Acropolis commonly connected with the basis of Euthydicus. (Collignon, *Sculpture grecque*, I, pl. vi.) The school is clearly Attic, and the head with the *κεκρύφαιλος* in the Louvre belongs to a type which can be traced in the reliefs of Rhamnus and in the grave monuments. It represents a type created by the Attic school in the fifth century, about 450-440 B.C. (II) Is it original or copy? That the ancients made exact mechanical copies is known. But the copyist always uses the technical means of his time, and, however close his imitation, can be detected by some slight incongruities. A modern painter does not give an exact copy of Botticelli. A close examination of the Louvre head shows that it possesses the technical peculiarities

of the fifth century, and nothing that points to a later date. The marble also appears Greek, though on this point Pottier expresses himself with great caution. The head appears to be an original Greek work of the fifth century, and deserves to rank among the most beautiful pieces in the Louvre. (III) Is it Sappho? For this name there is no evidence that will bear examination. Even if the coins of Mitylene afford a safe clue, they show a great variety of coiffure, and the *κεκρόφαλος* is a style of headdress which the monuments of the fifth century show could be worn by women in all conditions of life. In conclusion Pottier expresses himself strongly against the prevailing habit of assigning works to definite artists, and insists that our ambition should be limited to classification of ancient works by epochs and schools, without attempting to determine their authors.

Athena Lemnia.—In the *Sitzungsber. Mün. Acad.* 1897, pp. 289-292, A. Furtwängler publishes a relief from Epidauros upon which Athena is represented holding a helmet in her hand. In spite of some differences this Athena resembles the type claimed by Furtwängler, *Masterpieces*, pp. 4-26, as that of the Athena Lemnia. The relief is Attic work of a date about 400 n.c. The other figure of the relief is a man leaning on his staff. His right hand touches the helmet which Athena holds. Possibly this is Hephaestus, and in that case, as Hephaestus is the patron deity of Lemnos, the relief may stand in some close relation to the Lemnian cleruchs and the Athena Lemnia.

Leaping Amazon restored as Diana.—Dr. S. Ricci calls attention to a statue in the Royal Museum at Turin, of which the only antique part is a draped female torso of green basalt. This has been restored at some unknown period in black Piedmontese marble to represent Diana. The restoration is manifestly wrong, and apparently purposely so (cf. Dütschke's *Antike Bildw. in Oberital.* IV, p. 52, no. 80). The figure was that of an Amazon in the act of springing to horse toward her left by the help of her lance, which was grasped by the right hand high above the head, and by the left midway of the thigh at the left side. Of this third (Phidian?) type of Amazon no examples are extant that preserve the head; but sufficient of the neck of the Turin torso is left to justify the author in proposing to depart from Michaelis's conjectural restoration so far as to represent the head as turned somewhat to the left and downward, as at the moment of the leap. (*Rend. Acc. Lincei*, 1897, pp. 320-331.)

Two Stelae from Cynosarges.—Two fragmentary stelae, of Pentelic marble, were found in the excavation of the British School, at Cynosarges, in the winter of 1895-96.

The first, belonging to a group described by Köhler in the *Athen. Mitth.* for 1885, has a rectangular top with pediment and acroteria in relief, and pilasters at the side. The sculpture shows only the upper part of the figure of a woman who has hair like that of Hegeso and holds her mantle out in front with the straight, stiff fingers of the left hand. There is room for another figure at the right. The inscription Σ[τηρικ]α[λεια] or Κ[τηρικ]α[λεια], has the Ionic Η and four-barred sigma. The style suggests a date not long before the Peloponnesian War.

The second stèle, which is later, has lower relief and no pilasters. A woman is seated, in the attitude of mourning, with chin resting on the right hand and right elbow supported by the left hand, while beside her chair stands a bearded man clasping the hand of a third figure, of which scarcely anything remains. The woman looks up at this last figure, which probably represented the person commemorated. The grouping is peculiar, one figure being seated and not taking part in the clasping of hands. The combination of the mourning attitude with the upward look, itself not common before the fourth century, instead of the bent head, is also to be noticed. The manner in which the drapery hangs from the woman's shoulder is characteristic of the end of the fifth century (cf. the stèle of Tynnias at Athens). (C. E. EDGAR, *J.H.S.* 1897, I, pp. 174 f.; 1 plate.)

Draped Aphrodite.—At the meeting of the Academy of Inscriptions, July 9, 1897, S. Reinach showed a photograph of a marble group formerly acquired at Athens by M. Piscatory, French Minister, now the property of his daughter, Mme. Trubert. This group, representing a draped Aphrodite accompanied by Eros, shows some archaic details which seem to support Furtwängler's opinion that the type of draped Aphrodite goes back to the age of Phidias. (*C. R. Acad. Insc.* 1897, p. 365.)

The Mausoleum at Halicarnassus.—In *Archæologia*, LV, 1897, pp. 343-390, Edmund Oldfield discusses the probable arrangement and signification of the sculptures of the Mausoleum. This paper was read at meetings of the Society of Antiquaries, November 26, December 3 and 10, 1896. A previous paper (*Archæologia*, LIV) treated of the architecture of the Mausoleum. Here a change is proposed, reducing the size of the piers by which the pyramidal superstructure was supported. The frieze of the Amazons is accepted as the frieze of the principal order. The frieze of the Centauromachia appears to have been much less in extent than the Amazon frieze, and is assigned to a sub-podium at the east and west fronts. These subjects were chosen on account of the connection of Halicarnassus with Troezen, the birthplace of Theseus. The "chariot frieze" is assigned to an inner vestibule in the ground story of the building. The great figures of Mausolus and Artemisia stood in the chariot on the top of the pyramid, Mausolus standing at the right of his wife, holding the reins in his hand. The detached equestrian groups are placed at the corners of the sub-podium. The semi-colossal female heads numbered 44, 45, 46, in the official *Guide to the Mausoleum Room* may have belonged to the acroteria of the two gables, which perhaps represented the six Carian towns incorporated in Halicarnassus by Mausolus. To some fragments no definite place can be assigned. Much has certainly been lost, including all the bronze figures. Perhaps, too, there was a frieze of figures carved separately and attached to a background, like the frieze of the Erechtheum, but of this there are no remains. The paper is illustrated with pl. xx and five figs.

The Relief of the Peliades at Berlin.—This is an antique, thoroughly worked over by a sculptor of the Renaissance, but not, as Löwy contends, a renaissance copy of an antique.

The resemblance, pointed out by Brunn, between the figure of the standing Peliad with the sword and the Medea of certain Pompeian and Herculanean pictures, where she contemplates the murder of her children, does not justify his assumption that this figure in the relief, and not the one with barbaric dress who holds the magic box, is Medea; it points rather to the daughter of Pelias as the one whose moral situation most resembles that of Medea in the pictures. Indeed, the tracing of characteristic types as applied to individuals in the Athenian art of the fifth century has been carried too far, as for example in the explanations of the east frieze of the Nike temple and of the gods in the Parthenon frieze. The artistic explanation of certain attitudes or situations should be found rather in the circumstances than in the individual to be represented.

In comparisons between this and the Orpheus relief, the latter is usually reckoned the superior composition, but not justly so. It shows neither in the grouping nor in the separate figures anything beyond what was common property at the time of the Parthenon sculptures; whereas the harmonious union of the figures of the two Peliades, the bowed attitude of one and the effectiveness of her drapery, are not the product of an ordinary talent. This relief shows, in addition to the charms of time and surroundings common to both, that of an original artistic personality.

Finally, a likeness is to be noted between the standing Peliad and the statue on the Acropolis explained by Michaelis and Winter as Procne with Itys (*v. Antik. Denkm.* II, pl. 22). (R. KEKULÉ VON STRADONITZ, June (1897) meeting of the Berlin Arch. Soc., *Arch. Anz.* 1897, III, p. 137.)

A Bas-relief from the Palatine.—Dr. L. Savignoni, in the *B. Com. Roma*, 1897, pp. 73-102, discusses the subject and artistic relationship of a much-mutilated relief found on the Palatine and now preserved in the Museum of the Thermae at Rome (*Guida del Museo delle Terme*, p. 30, casetta E, sala 2, no. 8; Matz and von Duhn, *Zerst. antike Bildw. in Rom*, III, 3731). The relief is of Pentelic marble, and displays the characteristics of the best Attic art, though itself evidently a copy, and apparently of Roman times. It represents three draped female figures, standing close together, of whom the one in the centre turns toward the one at the left with a gesture of entreaty, while the one at the right turns away from the others as if in anger or repugnance. The relief corresponds in general character, and belongs in a group with the three well-known reliefs of Orpheus, Eurydice, and Hermes, of Medea and the Peliades, and of Pirithous, Theseus, and Heracles. But a very close kinship is traced between this relief and the well-known painting on marble from Herculaneum (reproduced in an accompanying plate) depicting Leto, Niobe, and Phoebe, and at their feet Iliaera and Aglaia playing jackstones (*Museo Borbonico*, XV, 48; Roux, *Herc. et Pomp.* II, 17, etc.). This pair of players has no dramatic connection with the rest of the group, which must be precisely identified with the group of the Palatine relief, though the psychologic moments represented are slightly different. Niobe and Leto have previously been friends. But a disagreement has for some reason sprung up

between them. In the relief, Niobe is appealing to Phoebe for her kind offices in bringing about a reconciliation with the offended Leto. In the painting a succeeding moment is depicted, where Niobe, under the encouragement and with the intercession of Phoebe, is taking the hand of the yet reluctant Leto. The author goes on to point out the precise reference of both relief and painting to an original painting of the school of Polygnotus, and the analogies between them and some vase paintings of the best style (especially that of Midias; cf. Klein, *Vasen mit Meistersignaturen*, p. 203), which must have drawn their inspiration from the same source. (*B. Com. Roma*, 1897, pp. 73-102; 2 plates, 4 cuts.)

The Mantinean Basis.—In W. Amelung's *Die Basis des Praxiteles aus Mantinea*, München, 1895, which was overlooked in preparing the paper *J.H.S.* 1896, p. 280, certain facts are given as to the cutting of the edges of the Mantinean slabs, which prove conclusively that the two muse-slabs formed the sides of the basis, the one with the seated muse at the right having been on the right side; and the Marsyas slab was the right half of the front, another muse-slab, now lost, having formed the left half. (*P. GARDNER, J.H.S.* 1897, I, pp. 120 f.)

A Group of Eleusinian Divinities.—A combination of the Cora of the Villa Albani (Hellbig, *Führer*, II, 835), the statue of a boy at St. Petersburg (Friederichs-Wolters, 217), and the Demeter from Cherchel (*Am. J. Arch.* 1897, p. 400) may be taken to represent the group by the elder Praxiteles of Demeter, Persephone, and Iacchus (Paus. I, 2, 4). The assumption is justified by the resemblance of the group thus formed to that of the Eleusinian relief, in which the singular representation of Triptolemus as a boy, without the winged chariot, is due to the direct influence of the Praxitelean model. The existence of standing types of Demeter and Cora in the middle of the fifth century is shown in other monuments, *e. g.* the Parthenon metope, Michaëlis, III, 19, representing the Eleusinian goddesses at their festival. The youthful type of Iacchus is exemplified in various passages of poetry. (*A. KALKMANN*, June [1897] meeting of the Berlin Arch. Soc., *Arch. Anz.* 1897, III, p. 136.)

A So-called "Todtenmahl" Relief with Inscription.—In the *Sitzungsber. Mün. Acad.* 1897, pp. 401-414, A. Furtwängler publishes a "Todtenmahl" relief with the inscription Ἀριστομάχη, Θεωρίς, Ὀλυμπιόδωρος ἀνέθεσαν Δαΐ Ἐπιτελείω Φιλῶ καὶ τῇ μητρὶ τοῦ θεοῦ Φιλῶ καὶ Τύχη Ἀγαθῇ τοῦ θεοῦ γυναικί. The scene is the usual one. A bearded male is lying on a couch upon which sits a draped female. Close by stands a boy beside a great amphora. In his left hand he holds a phiale. At the left are three worshippers, — a man and two women, — no doubt the three who dedicated the relief. The recumbent figure holds a phiale in one hand, in the other a great horn from which a cake projects. Before him stands a table with cakes. Zeus Ἐπιτέλειος is here identified with Zeus Φάιος. He is no doubt identical with Zeus Τάλειος. These epithets, as also Μαλχίος and Μαλιχός, belong to a chthonic god. This appears in the cult, and dedications to Zeus with these epithets are found in sanctuaries of Asclepius, especially at

Munychia. This relief is Attic work of the fourth century B.C. The Ἀγαθή Τύχη, here called wife of Zeus Ἐπιτάλειος, is usually associated with Ἀγαθὸς Δαίμων.

Funerary Group from Alexandria.—In the *C. R. Acad. Insc.* 1897, pp. 511–512, is a brief description, by M. Collignon, of a limestone funerary group in Alexandria. A seated woman is represented, and beside her stands a young girl. This is a new specimen of the funerary statues, of which the so-called Penelope of the Vatican is the most familiar example. The type of the seated woman is somewhat like that of the female figures on Attic stelae of the fourth century B.C., and recalls, in some respects, the style of Scopas. The group in Alexandria was executed in Egypt in the times of the earlier Ptolemies, and shows how strong was the influence of the art of Greece proper upon the hellenized art of Egypt.

Examples and Characteristics of Alexandrian Art.—In the *B. Com. Roma*, 1897, pp. 110–142 (two plates and thirteen cuts), W. Amelung discusses this subject, starting with the mention and description of a number of sculptures known to date from the Egypt of the Ptolemies. From the examination and comparison of these, he proceeds to define tentatively certain general characteristics of Alexandrian art, in the light of which he examines and ventures to ascribe to the same country and period certain other objects of previously undetermined provenience, the most important of which are two feminine heads preserved in the Magazzino of the Caelian, here published in heliotype. Both were found near S. Clemente, where there formerly existed a sanctuary of Isis (see *B. Com. Roma*, 1887, pp. 132 ff.). The one represents an Egyptian princess with the vulture-headress, after the fashion of the Egyptian goddesses. The other depicts a young woman with a crown of laurel, and the back part of the hair covered with a peculiar sort of coif. Perhaps it is the portrait of a poetess, or the head of a Muse. The author determines that the Alexandrian style is marked by a certain idealization, which, without departing as widely from the living model as in the earlier Greek age, exaggerates the feminine as above the masculine elements of character, and displays a decided tendency toward excessive softness and sweetness and blending of outlines. Its characteristics are accordingly most strikingly seen in representations of females, but are sufficiently marked in some male heads; cf. *e. g.* with the Pergamene reliefs the head of a Gaul in the Gizeh Museum, mentioned by Reinach in the *R. Arch.* 1889, p. 189, and discussed at length by Schreiber (*Der Gallierkopf des Museums in Gizeh bei Kairo*, Lpz. 1896). Certain peculiarities of detail in the modelling of the hair and of the eyes are also pointed out. With regard to the origin of the Alexandrian style, the author arrives at the conclusion that it is not an independent development on Egyptian soil, but is an outgrowth of the Athenian school of sculpture, and, in particular, of the school of Praxiteles.

Aphrodite of Aphrodisias.—In *Athen. Mith.* XXII, pp. 361–380, pls. xi, xii, C. Fredrich has collected and discussed fifteen representations of a goddess, which have been found in Athens, Ostia, Rome, Parma, Majorca,

and Aphrodisias in Caria. Though differing in details, all the replicas agree in the general characteristics. The statue is of a woman, fully developed, who stands with the feet close together, and the elbows close to the sides, while the forearms are extended. She wears a chiton, of which the sleeves and lower part are visible, and a heavy mantle which falls from the back of the head over the shoulders and back almost to the ground. The third garment is a sort of apron which reaches from the shoulders to the knees, either suspended from the neck or fastened at the shoulders. It seems laced together at the back, for it closely encircles the form and gives it the appearance of a tree trunk. It is divided into three or four horizontal bands which are decorated with figures in relief, which differ in order and number, though always of the same general character. According to these figures the replicas are divided into three groups. The fourth stripe, which is lacking in one group, contains Erotes variously occupied. The third in all copies shows a woman riding on a sea-goat. The other two fields show greater variety. All copies show the three Charites, and busts of Helius and Selene, and some add Hera and Zeus. The head of the statue is crowned with laurel, and on it is placed a calathus, while the neck is adorned with jewels, and on the breast is a crescent. Evidently the reliefs show the might of the goddess in heaven, earth, and sea, and we have to do with an all-powerful nature goddess, in Greek Aphrodite, who was worshipped in Cnidus as *δορῆτις*, *εὐπλοία*, and *ἀκραία*. In appearance this Aphrodite bears a close resemblance to the Artemis of Ephesus and other Eastern deities. A similar figure appears on the coins of Aphrodisias in Caria, from the time of Augustus. The worship of the Charites and Eros is also proved for this city. The statue of which these statuettes are copies must be a copy of the older image, probably made after Alexander's conquest had caused new life in this region. The popularity of this cult seems to have begun to spread under the Julian emperors, and was doubtless aided by the peculiar character of the image. The Athenian copy was found near the "Garden" where Aphrodite was honored, and may well have occupied a special chapel in that sacred precinct.

The Statue from Subiaco.—In the *R. Arch.* XXXI, 1897, pp. 265-290 (cut), A. de Ridder discusses previous interpretations of this statue and, finding them all unsatisfactory, proposes to interpret it as a ball-player about to catch a ball in his raised right hand. Perhaps the posture of the figure, which de Ridder thinks is that of a runner stopping suddenly when at full speed, is due in part to a rule of the game forbidding him to overstep a certain line.

The Aphrodite of Melos.—In the *Sitzungsber. Mün. Acad.* 1897, pp. 414-420, A. Furtwängler discusses Voutier's drawings of the Aphrodite and the Hermæ found with it. He finds that Voutier put the two inscriptions under the two Hermæ in entirely arbitrary fashion. The inscription of Theodoridas is incomplete and once had an entire word after the name *Δαισιστράτο*. The other inscription is of course incomplete, but even Voutier's drawing, though it does not give the plinths correctly, shows that the

stone on which the inscription was engraved was broken in the way shown by Debay's drawing. Cuts of Voutier's drawings illustrate this article, which is directed against Reinach's view, expressed in *Chron. d. Arts*, 1897, pp. 16 ff., 24 ff., 42 ff., *Nation*, March 25, 1897, p. 222, that the inscription of the artist from Magnesia should not be associated with the Aphrodite because Voutier puts it under one of the Hermae. Furtwängler finds in Voutier's drawings further confirmation of his contention that this inscription belongs to the Aphrodite.

A Silver Lecythus.—In the *R. Arch.* XXXI, 1897, pp. 161-165 (three cuts), J. Six publishes a silver lecythus in the Fuld collection in Amsterdam. The vessel was evidently not intended to be used for pouring liquids, and it holds very little. Probably it was used to contain perfumes which were passed among the guests at banquets. The front of the lecythus is a high relief representing Aphrodite seated on a swan. The form of the body, the type and expression of the face, recall the Attic school under the influence of Praxiteles, while the composition reminds one of the works of Timotheus as known by the acroteria of Epidaureus. The lecythus was found in one of the eastern provinces of the Netherlands. No exact parallel to this work is known, though somewhat similar lecythi are known in terra-cotta. Six publishes a bronze lecythus in Naples in the form of a girl's head as the nearest parallel in metal known to him. The artist of the silver lecythus seems to have in mind the springtime which brings Aphrodite with the arrival of the birds of passage.

A Thracian Portrait.—A finely worked barbarian portrait head in the National Museum at Athens has the same strongly individual features, of a Thracian type, as a coin of Augustan period belonging to a Cotys and his son Rhaseuporis. A fresh study of the places where these names occur, in inscriptions and in Dion, Appian, etc., leads to conclusions at variance with Mommsen's theory; viz. that the line of Odrysian kings named Sadala and Cotys, who aided Pompey at Pharsala, came to an end in 42 B.C.; that its dominions were absorbed by a Sapaeian dynasty in which both names of the coin occur repeatedly; that a king Cotys, of this Sapaeian line, who died in 17 B.C., was the original of the coin and of a statue made by Antignotus and dedicated by the Athenian demus, the inscription of which has been preserved. The head in question, therefore, belonged to this statue, and its extraordinary truthfulness and individuality show Antignotus to have been one of the first sculptors of his time, but following Hellenistic tradition rather than the tendency to the abstract which grew up under Augustus. The tyrannicides attributed to him by Pliny may have been statues of Brutus and Cassius. (J. W. CROWFOOT, *J.H.S.* October, 1897, pp. 321-362; 1 plate, 1 cut.)

Ariarathes IX.—In *Athen. Mitth.* XXII, pp. 415-418, J. Six identifies as a portrait of Ariarathes IX, son of Mithradates, a head found on the west slope of the Acropolis and published in *Athen. Mitth.* XXI, pl. x, by Schrader. This conclusion is reached by a comparison with coins which Imhoof believed to represent Mithradates, but which Reinach has shown

to belong to Ariarathes. A statue to Ariarathes in Athens is most probable for the year 88 B.C., at which time he was nineteen years old, an age which agrees well with the character of the head.

Statue of a Stephanephorus from Smyrna.—In the *R. Arch.* XXXI, 1897, pp. 341-342, pl. xix, S. Reinach publishes a drawing from Peirese's manuscript. It represents a draped male figure with a garland about his head. The inscription, *C.I.G.* III, No. 3194, reads:

Ἡ σύνοδος τῶν μυστῶν τῆς μεγάλης θεᾶς πρὸ πόλε-
ως Θεσμοφόρον Δήμητρος Μητροδώρον Ἑρμογι-
νους τοῦ Μητροδώρου Ματρίαν συμμάρτυρα Ν . . .
..... τὸν στεφανηφόρον.

The statue came from Smyrna, and was formerly in the collection of Federico Contarini in Venice. The drawing is published in the hope of eliciting some information concerning the statue or the Contarini collection.

Scopas Minor.—In *Röm. Mitth.* XII, pp. 144-147, E. Loewy publishes an appendix to his article on "Scopa Minore" (cf. *Am. J. Arch.* 1897, p. 406), in which he adds four more examples to the collection there given. These are a bronze disc (unpublished) in the Provinzial-Museum at Bonn, a medallion from a terra-sigillata vase (*Gaz. Arch.* VI, pl. 30), another bronze disc (*Gaz. Arch.* XI, pl. 6), and a marble relief in the Louvre (fig. 2).

VASES AND PAINTING

New Fragment of Mycenaean Painting.—In the *R. Arch.* XXXI, 1897, pp. 374-380, pl. xx, B. Pharmakowski publishes a fragment of painting found in 1893 at Mycenae by a Roumanian archaeologist and subsequently presented to the museum at Bucharest. The plate is a reproduction of the *Annales de la Société impériale archéologique de Saint-Petersbourg*, Vol. IX, pl. iii, and the text is a résumé of Pharmakowski's Russian article which accompanied the original publication. The fragment represents the right arm, shoulder, and part of the neck and breast of a person holding a flower, or rather a bud. The upper arm is encircled by a blue armlet, the neck by a red necklace. Outlines are drawn in yellow, the background is blue, and the flesh parts brown, showing that a man is represented. Incised lines are used in some places, apparently as an aid to the painter's hand. Three periods of Mycenaean painting may be distinguished: first, that represented by this fragment: incised lines, outlines of a color different from background and interior, no trace of shading; second, that represented by the fresco of the persons with asses' heads: no incised lines, outlines of a color different from background and interior, attempts at shading; third, that of the bull of Tiryns: no outlines of a particular color, figures of one color, hatched shading. The new fragment shows marked Egyptian influence, but also the beginnings of independent observation of nature.

Survival of Mycenaean Ornament.—The influence of the Mycenaean art in the Rhodian and early Attic vases has been already pointed out, but

its survival in other fields is the subject of an article by S. Wide in *Athen. Mith.* XXII, pp. 233-253, illustrated by pl. vi, and twenty-eight cuts in the text. While on the mainland the geometric style shows traces of Mycenaean influence only near the end of its existence, on the islands the influence of the earlier style is more marked. This is proved by the examination of thirteen vases, chiefly from Crete, which in their decoration show *motifs* foreign to the strict geometric ornamentation, but easily derived from forms common in Mycenaean art. This leads to the conclusion that the Mycenaean art was stronger and lasted longer on the islands than on the mainland, and consequently that its centre must have been either on the islands, as at Crete or Rhodes, or on the Asiatic coast. Another field in which Mycenaean influence survives is in the bronze ornaments from Hallstatt. Seven examples are cited which show in their decoration variations on characteristic Mycenaean types. If this is correct, the connection between Hallstatt and Mycenae is too marked to be the result of mere accident. This seems to show that the commonly received date (c. 800 B.C.) of the Hallstatt civilization is somewhat too late, and that those are right who would date it a century or two earlier. This, however, is to be noted, that we have as yet no fixed date for the passing of the Mycenaean civilization from the islands or the East, even if 1000 B.C. be accepted for the mainland. It seems more probable that the Mycenaean art came into Northern Europe by way of the Danube than by way of the Adriatic, for the Ionian art is in many ways the heir of the Mycenaean, while the absence of Mycenaean objects at Olympia shows that this influence scarcely reached the west coast of Greece. If this is right, the Hungarian bronze age must have already passed, for this shows but very scanty traces of the influence of Mycenae.

Early Vases from Aegina.—Some of the fragments of vases, which B. Stais discovered in a shaft near the so-called temple of Aphrodite on Aegina, are described in great detail by L. Pallat in *Athen. Mith.* XXII, pp. 264-333, pls. vii, viii, and further illustrated by forty-two figures in the text. The article is concerned only with the oldest fragments, which may be divided into three classes. The Mycenaean period is represented by only three fragments. More numerous are the geometric specimens, which in general cannot be distinguished from the Attic products, and in some cases approach in decoration the late geometric and early Attic styles. The earlier observation that this neighborhood was especially rich in proto-Corinthian fragments, which in many cases were different from the best-known examples of this style, is confirmed by these finds, and these fragments are subjected by Dr. Pallat to a very exhaustive examination, according to the different forms represented. This part of the article cannot be summarized, as it is a description of a great number of fragments, many of them very small, with special reference to the clay, color, and technical execution, as well as the designs employed in decoration. While all show the general character of the proto-Corinthian vases, they differ from the usual styles and from one another in many details of material, color, and size. This examination confirms the opinion that the proto-Corinthian

developed from a geometric style, but it also shows that this technique was not confined to small vessels but extended to all sizes. These discoveries also furnish much information as to the development of this style, about which we have hitherto had but little information. The early Attic shows a very similar course, and its relation to the proto-Corinthian has already been pointed out. The old Corinthian style (c. 700 B.C.) is the direct successor of the proto-Corinthian, and this find shows the transition, and also that the later form treats the material badly and draws more carelessly, as if called forth by the desire for rapid production. This is illustrated by a number of fragments, including one with a fragmentary and unintelligible Corinthian inscription.

The most important vase in this mass, and one of the most important found in Aegina, belonging with the platter and the griffin-headed vase, is a pitcher with very wide neck, of which only the neck and part of the shoulder are preserved. The shoulder shows a procession of three rams, from each of which hangs a man. As the fragments make the size of the vase certain, it appears that the design could not have been repeated three times in full, and we must suppose that on the missing fragment the mouth of the cave of Polyphemos was indicated, from which the last ram had only partly issued. If this is correct, this is the earliest illustration of this Homeric episode. The style of this vase seems to distinguish it from early Attic and proto-Corinthian, though it shows analogies to both. A later example of the same style is the griffin-headed vase. Perhaps they represent a local style.

Vase from Aegina. — In *Athen. Mitth.* XXII, pp. 259-264, G. Loescheke discusses a vase in the British Museum, formerly in the possession of Castellani, and identical with a vase from Aegina mentioned by Gerhard (*Arch. Intelligenzblatt*, 1837, p. 95). When Castellani bought the vase it was said to have been found at Santorin, and has therefore been used wrongly in connection with the history of art, *e. g.* by Rayet-Collignon, *Céramique grecque*, 52, and Brunn, *Kunstgeschichte*, I, 136. The vase is a pitcher ending in a griffin's head, decorated with conventional patterns, and with animals on the shoulder. No conclusions as to place of manufacture can be drawn from its discovery at Aegina, for the vases of Aegina show the history of Aeginetan trade rather than manufacture. This is clear even from the small collection of Aeginetan fragments in the museum at Bonn, most of which were found on the site of the old city, or near the temple of "Aphrodite." This list includes examples from Cyprus, Naucratis, Fikellura (*i. e.* Samos), but for the most part consists of fragments of Attic and Argive pottery. This abundance of imported vases at all periods shows that there can have been no large native manufacture, unless of common household utensils. The only certain products of Aeginetan potteries are the tiles of the temple of Athena.

Proto-Attic Amphora in Athens. — In the *Ἐφ. Ἀρχ.* 1897, pp. 67-86, pls. v, vi, Louis Couve publishes and discusses an amphora of proto-Attic style in the National Museum in Athens. This vase came from Peiraëus.

It was bought in 1880 by the Archaeological Society (Πρακτ. Ἀρχαιολ. Ἐταιρ. 1888, p. 6). It is mentioned *Berl. Phil. W.* 1888, p. 1483. The present number in the museum is 353. This amphora is large (1.10 m. in height), and was intended for a monument on a grave. It has a wide mouth and neck, with two handles rising from the shoulder of the vase and joining the neck about two-thirds of the way up. The front of the neck is adorned with a cock admirably and naturally represented. The body of the vase is round and full. The main adornment is a chariot drawn by four horses. In the chariot stands a man. Opposite the horses is a great lion, conventionally treated. The colors are black and violet on a ground of the reddish-yellow clay. In the vacant spaces are circles of dots, spirals, a bit of angular meander, and palmettes. On the shoulder of the vase are painted rays, and the same are found just above the foot. About the lip is a band of parallel broken lines, and a similar band encircles the lower part of the vase. Above this is a band of angular meanders arranged diagonally. The handles are adorned with rays and spirals, and a braid-pattern (Flechtmuster) adorns the neck beside the handle. The horses remind one of those on the Melian amphorae, though the style is here more developed. Little Oriental influence is seen, the style being chiefly geometrical, with some survivals of Mycenaean ornament. Amphorae are divided into three classes: (1) Wide neck, almost as wide as the belly, which is much rounded; handles at each side attached to the belly; high foot in the form of a truncated cone. To this class belong, *e. g.*, the Melian amphorae. Then the belly is lengthened, and this form appears in a Boeotian amphora. A series of large amphorae from Eretria have this form, though their handles are different. This class is not Attic. It disappears early, to appear again in the third century B.C. (2) Large vessels; belly only slightly contracted below, so that the foot is large; short neck, curving to join the curve of the belly. This type is not known in the Dipylon style, and but four specimens of it exist. (3) The chief type of the Attic amphorae, recognized by its cylindrical neck clearly separated from the shoulder, with two straight handles joining the neck to the belly. The development of this class is discussed. The vase under discussion belongs to the proto-Attic style, which follows the Dipylon style. It is to be classed with the crater from Aegina (*Arch. Zeit.* 1882, pls. 9, 10), the amphora representing Heracles and Nessus (*Ant. Denk.* I, p. 57), the amphorae with horses' heads, and the amphorae with Sirens (*Ἐθν. Μουσείον*, Nos. 221, 903, 904, 1003), though there are differences between all these. In this vase, the cock has sepulchral significance. Its naturalistic treatment shows that the bird was familiar to the artist, while the lion, which is conventionally treated, was not.

An Early Greek Vase in Stockholm.—In the National Museum at Stockholm is an amphora, brought from Athens in 1847. It has a small foot, large round body, cylindrical neck with flat horizontal rim, and two handles set on the upper part of the body slanting slightly outward. The lower part is coated with dark glaze-paint, leaving stripes of the clay ground; round the middle is a band of parallel horizontal lines, and on the

neck a broad stripe filled with vertical zig-zags; while the main decoration is on the upper part of the body between the handles, in quadrangular spaces framed on the sides by bands of parallel vertical lines. In all these details of shape and decoration and in several minor points, the vase corresponds with four others, one in Paris, one at Leyden, and two in Athens, which are all from Boeotia. The shoulder ornament of the Stockholm vase consists, on the back, of two round spots made of concentric circles, and on the front, of a grazing stag, somewhat too slender, but truer to nature than the ordinary stags of the geometric style. There is no *fill-ornament*, but the entire body of the stag is dappled, partly with white spots on the dark paint, partly with black spots on the clay ground. This is a distinctly Oriental feature (cf. Rhodian vases and a Clazomenae sarcophagus in Berlin). The decoration of the two vases at Athens is entirely geometric, but the Paris and Leyden vases have the Oriental lion. The Stockholm vase is certainly Boeotian, and represents the beginning of the influence of Eastern motives on Boeotian art. (S. WIDE, *Jb. Arch. I.* 1897, pp. 195-199; 1 pl., 2 cuts.)

Flask from Boeotia.—In *Röm. Mith.* XII, pp. 105-110, L. Pollak publishes a Boeotian vase from the collection of the late Count Tyszkiewicz. It is a soldier's flask, flat on one side, slightly convex on the other, made from a brownish-yellow clay, and decorated in dull brown. The chief decoration is a gorgoneion, probably bearded, and surrounded by nineteen snakes, symmetrically arranged. Back of the handle is an inscription in Boeotian characters, $\Phi\theta\acute{\alpha}\delta\alpha\varsigma\ \epsilon\mu'\ \epsilon\pi\omicron\iota\varsigma\epsilon\sigma\epsilon$.

The character of the writing shows that the vase dates from the last third of the sixth century, which makes it the oldest signed Boeotian vase. As is the case with the other signed vases, it shows the conservatism of the Boeotian potters. The gorgoneion is new on Boeotian ware, and on this vase recalls the East Greek type. The beard, but not the snakes, is found in Corinthian art, and the snakes are usually lacking in Chalcidian work. The symmetrical arrangement of the snakes is known in Cyrene and Attica, and confirms the suggestion of Studniczka, as to the arrangement of the twelve snakes about the head of Phobus on the pseudo-Hesiodic Shield of Heracles, which is a product of the same region about a century and a half before the vase.

Winged Athena.—*Röm. Mith.* XII, pp. 307-317, pl. xii, contains a publication by L. Saviguoni of a black-figured vase from the Faina collection in Orvieto, which has already been described by Körte (*Annali*, 1877, p. 128, No. 12 m). It is a cup about 114 mm. high and 133 mm. in diameter, of the fine red clay used in Attic vases, and with the decoration in glossy black varnish. The important part of the decoration consists of two figures of Athena. On the one side is the goddess in long Ionic chiton, with spear, shield and helmet, but without the aegis. On the other she is represented in similar costume and attitude, but without the spear, the aegis extended over the left arm, and a pair of curved wings. In spite of the style these wings led Körte to consider the vase as Etruscan, while it has also been

cited to confirm Brunn's theory of the vases. The technique of the vase shows plainly the Attic origin, and the winged Athena is not wholly unknown. Such a figure occurs on a Boeotian coin which points to a prototype at least as early as the fourth century. A scarabaeus from Amatunte in Cyprus shows another example somewhat earlier than the coin. With this may be compared a figure on the sarcophagus from Clazomenae at Berlin (*Ant. Denk.* I, pl. 44), and also the frieze from the treasury of the Cnidians at Delphi, where the goddess is certainly winged. Such a winged Athena, then, is not merely a late production, but belongs in early and distinctively Ionic art, whose influence on Attic is further shown by this vase. The two types of the goddess may be traced to the early conceptions of her as a goddess of war, or from a still more primitive view as a goddess of the air. In the latter capacity only she is winged, and carries the aegis, an admirable picture of the thunder storm. It is to be noted that on the Boeotian coin Athena not only extends the aegis but also brandishes the thunderbolt of Zeus. It is a type due to Oriental influence, and to this source may be due its revival in Macedonian times.

Inscribed Oenochos.—In the *Röm. Mitth.* XII, pp. 110-111, L. Pollak describes a bronze jug from Chieti in the Abruzzi, bearing on its base the inscription $\chi\acute{\alpha}\lambda\iota\varsigma$ in the Chalcidian alphabet, though whether Euboean or Italian must remain uncertain. This is important as furnishing documentary evidence for the origin of this form of *oenochos*.

Silenus and Midas.—On pl. xiii of Vol. XXII of the *Athen. Mitth.* is published a small black-figured vase from Eleusis, which is discussed by H. Bulle in the same volume, pp. 387-404. The vase is fragmentary, but seems on one side to have a ploughing scene, while the front showed Silenus brought in fetters before King Midas. The only other archaic vase with this scene is a black-figured cup in the Louvre, but the series reaches from the middle of the sixth to the beginning of the fourth century. The early date of this vase shows that the story owed its popularity not to the Satyr drama, but to popular tradition or some epic narrative. The Eleusinian vase stands alone in the introduction of Hermes, who does not belong to this story, and is probably transferred by the painter from other mythical scenes. The Macedonian and Phrygian versions of the Midas story must be kept carefully apart. In the latter only does Midas have ass's ears, a reminiscence of his original character as theriomorphic nature-spirit. His character as a spirit bringing moisture and fruitfulness can be traced even in our late sources. From northern Greece the story must have come to the Athenians, who, in the sixth century, can scarcely have thought of him except as king of a rich country, and perhaps this led to a ploughing scene on the reverse of the vase. On a London vase the woman who accompanies Midas bears the name Europa, a name known in northern Greece, and probably connected with Midas in that legend. The cylix of Ergotimus does not represent this legend, but a capture of a drunken Silenus by peasants, who celebrate their good fortune on the other side of the vase. The capture of such a spirit, either to get the benefit of his wisdom or for protection against his mischief.

is found in legends of other lands, and in Greece such a story is known in Tanagra (Paus. IX, 20, 4), where a Triton takes the place of a Satyr. Greek tradition in literature and on the vases shows many traces of a belief in the mischievous and spiteful nature of the Satyrs and Sileni.

Polyphemus. — In the *R. Arch.* XXXI, 1897, pp. 28-37 (6 figs.), P. Perdrizet publishes a black-figured Attic lecythus in the Rhousopoulos collection in Athens. The painting on the vase represents Polyphemus reclining in a cave. In his left hand he holds a club. Before him is a ram, under whose belly a man is tied. The man holds a sword in his hand. A second ram with a man under him follows the first. This is the most complete representation in vase-painting of the adventure of Odysseus. Other representations are discussed. The opinion is expressed that the incomplete representations are not abbreviations of a larger picture, but are incomplete because they did not need completeness in order to be understood. Types of Odysseus under the ram are known in bronze and terra-cotta, as well as in vase-painting. Black-figured vases have the scene of the ram and also the scene of the putting out of the Cyclops's eye, but neither is common on red-figured vases. A third scene — Odysseus offering wine to the Cyclops — has not yet been found in vase-painting, but occurs later on sarcophagi and lamps. The cave, which appears on the Eretrian lecythus with a representation of two of the companions of Odysseus turned into swine (published by Ziehen, *Festschrift für Overbeck*, p. 120), is explained as the sty of Circe.

The Crater from Orvieto and the Expression of Faces on Greek Vases. — In the *Monuments Grecs*, Nos. 23-25 (1895-1897), pp. 7-52, 12 figs., P. Girard discusses the attempts of Greek vase-painters to represent feelings, emotions, and the like. Especial attention is paid to the treatment of the eye. Turning to the painting representing the Argonauts on the crater from Orvieto in the Louvre, Salle G, No. 311, Girard shows that the scene represented is probably Heracles rebuking the Argonauts for their long stay at Lemnos (Apoll. Rhod. I, 865 ff.). At any rate, this painting shows great care and some ability in the portrayal of feelings by the expressions of the faces. This connects it rather with Polygnotus than with Micon, whose paintings in the Anaceum are not so accurately described as to enable us to tell just what scenes he represented. The theories of previous writers concerning the Orvieto vase are discussed at length.

Caeneus and the Centaurs. — A large red-figured celebe or crater at Harrow has a design of Caeneus and the Centaurs, of great boldness and originality, belonging to the later period of the cycle of Euphronius. It varies the usual grouping by introducing a third Centaur, and makes of each of the figures a distinct and very forcible type. Caeneus, as is usual on vases and reliefs, is buried in the ground to the waist; and the Centaurs are hurling stones and pine trees upon him. The body of one of them, who stands with back to the spectator, is a remarkable piece of fore-shortening.

In origin, probably, the battle of Centaurs and Lapiths was a struggle between wood-spirits, as seen in mountain storms, the Lapiths being later humanized for the sake of contrast. From the storm, perhaps, come the

pine trees and stones of the Caeneus myth; but the pine tree is elsewhere in Greek legend, as in the case of Pentheus and of Sinis, associated with ritual of human sacrifice, and stone-throwing is in various instances a ceremony for producing fertility. The curious upright portion of the half-buried Caeneus, also called Elateius, points to a custom of burying a human representative of the pine-tree spirit, and overwhelming him with stones, in order to promote the growth of pine trees. The change of sex attributed to Caeneus is paralleled, if not explained, in the disguise of Pentheus. (E. A. GARDNER, *J.H.S.* October, 1897, pp. 294-305; 1 pl., 1 cut.)

The Return of Persephone.—A new representation of the return of Persephone is found on a red-figured Attic crater from Falerii, now in the Berlin Museum, and published by P. Hartwig, *Röm. Mith.* XII, pp. 89-104. The decoration is in two rows, the lower containing on each side a lion and bull facing each other. The upper row contains ten figures. On one side the central figure is the goddess just emerging from the lower world, on the other this place is occupied by Hermes. Around the divinities dance eight so-called satyrs. On their foreheads are upright horns, the face and beard are given a goat-like appearance, and all have short tails. The significance of these figures is the most important point in connection with this *ἀνodos*. Two types may be distinguished. — A, with human feet, represented by five vases or fragments, including the new crater; B, with goat's feet, also found on five vases. On one of the latter group it is certain that actors are shown, and this is also possible for two of the first group. In some cases, however, they are rightly called Panes; and if this name can be applied to the dancers of the Berlin vase, we have a picture of the return of the goddess who brings the spring, first seen with delight in the woods where the Panes dwell. The return of Persephone is certainly shown on three Attic vases, and Hartwig also finds it on two vases which Robert (*Arch. Märk.* pp. 194 ff.) has explained as the rising of the nymph of a spring. On three of the four vases from the middle of the fifth century, the scene takes place in the presence of these goat-demons, which otherwise occur singly or with Hermes, and in one instance certainly represents a chorus. This raises the question whether all these vases are not concerned with mimetic representations, and whether these figures are not the *τράγοι* or *τίτνοι*, in distinction from the *σάτυροι* and *σαίληροι*. This must, for the present, be left unanswered; but it does not seem possible to be content with the simple name Panes or Panisci for these creatures. Loeschke has shown that they are unknown in archaic art, but are comparatively frequent during the fifth century, when the drama was developing. The new vase belongs to the period of transition from the severe to the fine style, as do apparently all the other craters of this shape with decoration in two rows of figures. This style is used for other forms, as well as for the crater. A list of nineteen vases of this type is given.

Encaustic Painting in Antiquity.—From the brief statements of Pliny and others in regard to encaustic painting, it has been learned that the ordinary process was twofold: (1) laying on the cold colors softened with Punie

wax, and perhaps a little oil, and (2) burning the paint in with a hot stick while at the same time blending the outlines of the separate patches of color. The artist could use only such colors and shades as he had already prepared, rapidly selecting from his color-box, as he worked, the shade most like each bit of color that he wished to represent. The use of hot wax colors was reserved especially for painting ships. It has further been supposed that the encaustic process, in the brilliancy of its effect, bore much the same relation to others that oil painting bears now. Accordingly, when certain Egyptian mummy portraits resembling oil painting were found, some years ago, it was thought that the encaustic work could be understood through them; but as they date from the centuries after Christ, they could not, at best, be considered evidence for the work of Greek times.

There is, however, other evidence which has not been sufficiently considered. Vitruvius says (VII, 9) that walls treated with vermilion were finished by being treated and rubbed with a wax candle or linen cloths, *as nude marble statues were treated*, a process that the Greeks called γάνωσις. It is recorded of Praxiteles that he prized most highly those of his marble statues that had received their *circumlitio* (γάνωσις) from Nicias, the celebrated encaustic painter. Certain other works of this Nicias are known or safely inferred to have been painted on marble. These are (1) a marble grave monument in Achaia (Paus. VII, 22, 6), on which a group of figures similar to those on Attic grave-reliefs was painted; (2) another painted grave monument (Plin. XXXV, 131), material not mentioned, but probably of marble, according to the custom of the time; (3) a painting of *Nemea sedens*, probably a votive tablet, which, on being brought to Rome in the time of Augustus, was set in the wall of the senate house, as if it were of marble, certainly not of wood. These facts seem to show that encaustic was the process used in painting marble. That it was so in architectural decoration is known from the building inscription of the Erechtheum and of the temple of Asclepius at Epidaurus. In the latter case, it was also used on stucco.

In the development of Greek art, sculpture, architecture, and painting go closely together. As to the time at which encaustic painting originated, Pliny mentions, as older artists in this kind, Polygnotus and Nicanor and Mnasilauus (or Arcesilaus) of Paros, also Elasippus of Aegina. The names which follow that of Polygnotus can belong, at latest, to the fifth century; but as the sixth was the great period for marble sculpture in the Greek islands, we may conclude that the Parians, Nicanor and Mnasilauus, were contemporaries of Aristion of Paros and Archermus the Chian. The work of their time survives in the Lyseas-stele. Other specimens of old Attic encaustic are the two pieces discussed by Dragendorff in the *Jb. Arch.* I. 1897, I (*Am. J. Arch.* 1897, pp. 407-409). The subsequent development of the art may be traced, partly through its imitations in cheaper materials, as in the Attic cylixes and lecythi with white ground, and in the wall-paintings on white background of the Casa Tiberiana. Of the six paintings on marble found in Pompeii and Herculaneum (if they are Greek originals,

and not Roman copies), the one with the astragal-players is probably of the fifth century; the others later, and the latest contemporary with the Alexander sarcophagus.

We have, then, a tradition of encaustic painting on marble, traced through several centuries, which, while keeping pace with the progress of art in general, still, from technical necessities, retained its essential characteristics unchanged. Its effect is entirely unlike that of the Egyptian mummy portraits. On the other hand, it is everywhere closely related to contemporary marble relief-work. A thorough study of the remains of encaustic, especially of the painted sculpture on the Acropolis and of the Sidon sarcophagi, should be made before it is too late.

The special merit of encaustic painting was not superior effectiveness, but durability. The wax painting of ships is especially said to have resisted the action of sun, wind, and salt water; and the same quality was desired in architecture, and in pictures as well. In this it corresponds with marble, the most durable building material. It was, however, used also on wood (Vitr. IV, 2, 29), and on stucco, as we have seen in the case of Epidauros. The same colors were used in this latter case as on marble, for the inscription mentions *cyanus*, the blue color actually found on the "Blue-beard" and on marble sculptures of the Acropolis. The use of encaustic on ivory is attested at least for the fourth and fifth centuries. But whatever the material, the style was such as especially suited marble; and in contrast to fresco and tempera painting, the art was, like that of sculpture in marble, essentially Greek. (F. WINTER, May [1897] meeting of Berlin Arch. Society, *Arch. Anz.* 1897, III, pp. 132-136.)

Greek Braziers.— Since the original publication by Conze of the remains of Greek braziers of the Hellenistic epoch (*Jb. Arch.* I. 1890, pp. 118 ff.) many more specimens have become known; and one, preserved entire, with the pot belonging to it, has been acquired by the Berlin Museum. It is said to have been found in the sea near Iasus (Asia Minor), and, indeed, both parts of it are covered with sea-growths. The ware of both pieces is dark brown, with flecks of mica. The brazier is of the same size and construction as the type restored from two separate fragments in Athens (*l.c.* p. 134), having the oblong draught hole in the side, perforated coal-pan above, and three handles in the upper rim, with bearded heads to support another vessel. The new specimen is, however, without ornament on the outside. The two-handled pot fits the top exactly, and shows clearly one use of such utensils. A similar entire brazier was reported by von Duhn as seen in the museum at Carthage in 1896; and the lower half of one, made not of clay but of lava, has been noticed by Petersen at Reggio.

Analogous to these braziers are the fire-pots, of exactly similar plan but less artistic proportions, still in use in Mediterranean regions; also the remains of vessels serving a similar purpose but of different shape, belonging to the Sixth City at Hissarlik (*Arch. Anz.* 1896, p. 108); and, less closely related, the tripods supporting fire-basins, seen on painted vases and on the skeleton cup from Boscoreale (*Arch. Anz.* 1896, p. 81). The oblong holes

in the standards found with large Dipylon vases may be a reminiscence of the draught holes in braziers.

Among the additional specimens of handles, many are of the types classified by Conze, but the following are new:

- (a) Silenus, with beard lying in separate strands on the projection.
- (b) Head rather of the philosopher type; beard as in *a*; background deeply sunk so that the head stands in a sort of niche.
- (c) Bald head, with distorted features; on the outside a gorgoneion (the second example found), with wings above the temples and two snakes tied under the chin; below this a support curves down and back to the side of the basin.
- (d) A negro head, with lips projecting to form the support; on the outside a Sirius (dog's or lion's head encircled by rays); and below this, on the outer surface of the basin, a female head in relief.
- (e) Another, with a third head, as in *d*, and an egg-and-tongue pattern around the rim.

The new specimens are from Sicily, Lower Italy, Asia Minor, Rhodes, Thera, etc. (F. WINTER, *Jb. Arch. I.* 1897, pp. 160-167; 7 cuts.)

INSCRIPTIONS

Further Discoveries of Cretan and Aegean Script.—New signs in both the linear and the pictographic systems have been found, some of Hittite or Lydian affinities, as the spider, and others hieroglyphic. The two systems occur together, but the linear, perhaps derived from primitive linear drawing, is older. The early prevalence of inscribed objects in Crete may be due to the large soapstone deposits, the use of pictographic characters and of hard stone coming with increased skill in cutting. A newly discovered class of hard stone seals, of Mycenaean period, has the shape of modern signets, and is apparently derived from the earlier button-seal. The evidence of systematic grouping of the signs is increased.

The most noteworthy inscribed object found in Crete is a piece of a stone libation table with three hollows, an exact model of an Egyptian table of the Twelfth Dynasty. It was found in the Dictaeon cave, the reputed birth-place of Zeus, under a sacrificial stratum of Mycenaean epoch, in which terra-cotta libation cups are frequent. While the copying of so important a sacred utensil implies a strong Egyptian influence, at least, on the form of worship, the threefold receptacle has analogies with the earliest religious ideas of Greece, especially the Arcadian ritual for the dead, illustrated by Odysseus's triple offering of melicreton, wine, and water. On the table is an inscription in clearly cut linear characters, showing at least ten signs, some like known Cretan symbols, and some like hieroglyphics. This, the first known example of the use of these alphabetic or syllabic signs for a purpose not purely personal, can only be a formal dedication. It is apparently, at least, as old as 2000 B.C., and if so, it antedates by a thousand years the earliest Semitic inscription.

Among the remains of a prehistoric civilization in Egypt, belonging evidently to the indigenous population which was subdued by the invading Pharaohs, are triliteral and cylindrical seals, with characters similar to those on Cretan seals. This early system of writing was then not Aegean, but rather Mediterranean, belonging as well to this white-skinned Libyan race with European affinities in Africa, as to the inhabitants of the Greek coasts. That it struck deep root in Africa is shown by its survival to this day among the Tuaregs, a Berber tribe. On the other hand, the oldest specimens of the Nile valley show borrowing from Babylonian sources. In Asia it must have been for centuries completely superseded by the cuneiform system, only to emerge again in a developed form in the hands of the Phoenicians.

Beyond such suggestions as that a sign with two peaks means mountain, or land; a plough, agriculture; the spider, spinning; a goat and bowls, the possession of flocks and herds; and groups of dots, numbers in the duodecimal system, no interpretation of the script is yet offered. (A. J. EVANS, *J.H.S.* October, 1897, pp. 327-395; 2 pls., 4 tabs., 35 cuts.)

Writing in Homer.—In the *Nation*, September 9, 1897, J. R. S. Sterrett discusses theories concerning the origin of the Phoenician alphabet from the hieroglyphs of Egypt, or the pictographs of the Hittites, or the pre-Hellenic characters discovered by A. J. Evans in Crete and elsewhere. Sterrett accepts de Rougé's theory that the Phoenicians derived their alphabet from Egypt. The early Aegean script is referred to in the *Iliad* (vi, 168 ff.) in the account of the "tokens of woe" which Bellerophon carried from Proetus to the king of Lycia. In the *Nation*, September 23, Sterrett gives an abstract of Ridgeway's article in *J.H.S.*, 1896, attributing to the Pelasgians the production of the objects called "Mycenaean."

Attic Mortgage Stones.—In the *Sitzungsberichte d. k. preuss. Akad. d. Wissenschaften*, 1897, pp. 764-775, E. Ziebarth publishes twenty-two new Attic mortgage inscriptions, mostly fragmentary. All belong to the second half of the fourth century B.C. They add little to what was already known. The form and material of the stones are discussed. The inscriptions are often carelessly executed, evidently not by professional stone-cutters. The two mortgage inscriptions from Amorgos in the Central Museum at Athens (Nos. 24 and 64, in the *Recueil des Inscriptions Juridiques Grecques*) are reprinted and discussed. In the first (No. 437 in Dittenberger's *Sylloge*), lines 7-9 read

Νι-

καταπέτης τῆς γυναικὸς (τ)
τῆς Ναυκράτους καὶ κυρίου
Ναυκράτους καὶ κατὰ τὰς δι-
αθήκας . . .

The second is preserved entire, and has been correctly published. The mortgage was the result of a judicial decision.

Athenian Campaign of 412 B.C.—Kavvadias discussed before the German Institute in Athens, February 2, 1898, an inscription discovered at the

foot of the Acropolis on the north, containing a decree of the senate and the people, moved by Alcibiades. It relates to events to be inferred from Thucydides, VIII, 23, 5 and 31, 1. In 412 B.C. the Athenians had reoccupied Clazomenae. There remained only the enemies of Athens in Daphnus. This inscription shows that the Athenians had occupied Daphnus, and ratifies the conduct of the generals. (*Athen.* March 5, 1898; *Berl. Phil. W.* March 12, 1898.)

Ostrakon of Themistocles.—In *Athen. Mitth.* 1897, pp. 345-348, R. Zahn publishes a potsherd in Athens. This was found northwest of the Parthenon, and bears the inscription, *Θεμιστοκλῆς Φρεάριος*. It is uncertain whether the ostracism is that of 483 or that of later date, when Themistocles was condemned. The addition of the *demoticon* is an innovation that is due to Cleisthenes.

Honorary Inscriptions.—In *B.C.H.* XX, pp. 548-562, P. Perdrizet has continued an article of Lechat's (*B.C.H.* XIII, p. 514), in which were collected several cases of honorary inscriptions, decorated with the ordinary emblem of the city of the person honored. Here are collected seven more examples, partly from Delphi. (1) Marble stele from the Acropolis at Athens (*C.I.A.* IV, 2, 51 b), bearing an inscription in honor of Alcetas of Syracuse, and the figure of a horse in repose. The horse galloping is common on the coins of Syracuse, but the proxeny stelae do not reproduce the types accurately. (2) Fragment from Delphi, in honor of a Theban, as seems clear from the sculptured club of Heracles at the top of the slab. (3) Stele from Epidaurus (Cavv. *Fouilles*, I, 111, No. 274), in honor of a Lampsacene, and showing an *hippaelectryon*. The coins of Lampsacus show a protome of a winged horse, which the sculptor of this monument seems to have transformed. (4) Another stele of Epidaurus (Cavv. *l.c.* No. 276) shows a female head to the left surrounded by three dolphins. The inscription is mutilated, but this type is found on the coins of Syracuse. (5) Another fragment at Epidaurus shows an eagle flying to the right with a thunderbolt in his claws. The inscription is lost, but it may have referred to an Elean, though the coins of Elis usually show a serpent or hare instead of a thunderbolt in the eagle's claws. (6) From Delphi, in honor of a man of Cleitor in Arcadia, about 300 B.C., and showing the bull charging, which appears on coins of Cleitor between 370 and 240 B.C. (7) Another fragment from Delphi, showing a sphinx toward the left, the right forepaw resting on the shoulder of an amphora. The device is found on the coins of Chios, and the person honored is a certain Amphiclus, a name famous in the legends of Chios (Paus. VII, 4). An Amphiclus of Chios was hieromonemon in the third century, and this inscription probably refers to him. Antigonus of Carystus, *Hist. Mir.* XV, mentions the custom of putting emblems of the cities on such decrees, and shows that such devices were called *παράσημα*. The two crows on the wagon, which he mentions as the *παράσημον* of Crannon in Thessaly, are found on three coins of that city. The custom seems to have been confined to the fourth and third centuries, for no example has been found among the many proxeny decrees of the

second century found at Delphi. In general they seem to have been most frequent at the great panhellenic sanctuaries.

Macedonian Documents. — In *B.C.H.* XXI, pp. 161-164, P. Perdrizet publishes a note on an inscription already noticed in *B.C.H.* XVIII, p. 420. The text is not yet in a satisfactory state, as an accurate copy and squeeze are lacking. It is supposed to come from Heraclea Lyncestis, and contains two documents which may have no connection. The second is the *cursus honorum* of Paulus Caelidius Fronto, whose *nomen*, if the copy is right, is very rare. The other document is the end of an imperial letter, perhaps by Hadrian, relating to the repairs on the roads. It seems likely that it was to the Heracleotes, and concerned the *Via Egnatia* which passed through the city. In connection with this inscription is published another, from Dimitrios, 'H Μακεδονία, p. 428, in which is mentioned a *γραμματοφειλάκιον* at Thessalonica.

Inscription from Lebadea. — In *Athen. Mith.* 1897, pp. 179-182, A. Wilhelm publishes an inscription from Lebadea referring to the building of a temple before 171 B.C., which was erected from the funds given to the Boeotian League by Antigonus IV Epiphanes.

A Boeotian Name. — In *B.C.H.* XXI, p. 149, Perdrizet publishes a lead bullet at Tehinli-Kiosk bearing the word 'Οφέλτας, the Boeotian genitive of 'Οφέλτας. The same name is on another bullet published by Vischer, and probably refers to the Boeotian Opheltas, who lived about 200 B.C. (Polyb. XX, 6). The name has not been found in Boeotian inscriptions, and seems to have been confined to one family, claiming descent from the mythical founder of Chaeronea.

Inscriptions of Delphi. — In *B.C.H.* 1897, pp. 274-420, Th. Homolle publishes in uncials the results of the valuable epigraphical discoveries made in the course of the exploration of Delphi by the French School. Apart from the numerous decrees of proxeny, there is a series of brief inscriptions that serve as a commentary on Pausanias's description of the objects seen on the Sacred Way. Some of the most interesting of these are the following:

[Κ]ροτω[ν]ιδᾶται [Φαῦ]λλον [τοῦ δαΐνος Ἀπόλλωνι ἀνέθηκ]αν. (Paus. X, 9, 2.)
[Κορκυραῖαι] τῷ Ἀπόλλωνι ἀνέθεν | [Θεόπομπος ἐποίει Αἰγινάτας. (Paus. X, 9, 3.)

There are several inscriptions recording the names of the artists who made the statues of Arcas, Apheidas, Azan, and Triphylus, which are mentioned as dedicated by the Tegeates (Paus. X, 5, 6). The statues themselves have disappeared. The offerings of the Lacedaemonians after Aegospotami are represented by several inscriptions bearing the names of the generals mentioned by Paus. X, 9, 7-11:

Κ[υμ]έριος | Πελάσγο | Ἐφείσιος.
Αἰαντίδης | Παρθενίου | Μιλήσιος | Τείσανδρος ἐποί[ησ]ε.
Θεόπομπος | Λατόμπον | Μάλιος | Ἄλυτος ἐποίει.
Αὐτόνομος | Σαμίον | Ἐρετριεῖς.
Ἀπολλόδωρος | Καλλιφῶνος | Τροζάνιος.

Another relic seems to record the offering of the *δοῦριος ἱππος* (Paus. X, 9, 12); at least in the letters Δο and Ἀργ, Homolle thinks he discovers the words Δο(ῦριον) and Ἀργ(ῆαι), the dedicators. The *ductus* points to a period anterior to 456 B.C. The event took place in 547 (cf. Hdt. I, 82). There are also interesting fragments, such as the dedication made by Callimachus, the polemarch at Marathon (Paus. X, 10, 3), and that of the Tarentines (Paus. X, 10, 6).

Inscriptions relating to the Topography of Delphi.—*B.C.H.* XX, 605-639, contains a report of a paper read by Th. Homolle before the French School at Athens, January 29, 1896, in which he presented some inscriptions from Delphi, which have special importance for the topography of the sanctuary.

(1) *Ex voto* of the Argives, Paus. X, 10, 5. A large hemicycle stands next to the rectangular structure, identified with the offering of Lysander. The stones which bore the statues are carefully shaped, concave in front, and easily identified. They were inscribed with the names of the statues, and also the signature of the artist. The inscriptions give the legendary genealogy of the kings of Argos, as far as Heracles, but the bases with the names of Danaüs and Hypermnestra have not yet been found. All the inscriptions for the statues are retrograde, though in good characters of the fourth century. The artist, Antiphanes of Argos, who had made other works for Delphi, signs his name in the same characters, but written from left to right. The figures did not form a real group, but were simply placed next one another, and, as there were ten in all, did not even have so much unity as could be attained by a central figure.

(2) Dedicatory inscription of the Treasury of the Athenians. This has been found in fragments on eight stones, having a total length of 9.293 m. It is in old Attic characters, but in a Macedonian hand. It does not agree exactly with Paus. X, 11, 5, but reads Ἀθηναῖοι τ[ὸ]ι Ἀπόλλων[ι ἀπὸ Μείδ]ον ἀκ[ροθ]ῖναι τῆς Μαραθ[ῶ]νι μ[άχης]. The inscription was not on the building, but on the terrace at the south of the Treasury, and, in later times, this terrace had been so altered as to end with the seventh stone, and the letters ὦν μάχης had been removed. The new position of the seventh stone, at the corner, is shown by a decree of proxeny prior to 201 B.C., which is cut on the other face. This mutilation must have been due to a necessary change in the course of the Sacred Way, for only imperative reasons would have led to the mutilation of so important a monument. The modern hand in the inscription shows that it is not the original. Causes of damage were not lacking in the fourth century, and Aeschines alludes to a restoration of votive offerings of the Persian Wars. The new inscription evidently sought to reproduce the old. The copy shows the Σ and Ο. As the inscription is not on the Treasury itself, and the marks on the stones show that the basis was covered with offerings, the inscription must apply to these rather than to the building. It is also later than the construction of the Treasury; but this latter can only have been built after the battle of Marathon, for the Athenian victories of 506 B.C. were acknowledged by the building of the

portico. The only ancient writer besides Pausanias who mentions the Treasury is Xenophon, who dedicated there a statue of Apollo (*Anab.* V, 3, 5). When the building was destroyed, it is hard to say; but the state of the sculptures seems to prove that it was early buried and protected by a mass of earth.

(3) The inscription of the great altar. The altar was naturally a very important point in the arrangement of the sanctuary, and, as such, it is mentioned by Paus. X, 14, 7, and Hdt. IX, 81; II, 135. Two stones yield the inscription *Χίῳ Ἀπόλλωνι τὸν βωμόν*. The letters are of the fifth century, and belong to a monument older than Herodotus. It is perhaps due to the battle of Mycale. The altar itself has also been found, in the axis of the temple, but with a different orientation. It seems to have had a length of 5.88 m., and a depth of 2 m. At the southeast corner is a very carefully cut inscription: *Δελφοὶ ἔδωκαν Χίῳ προμαντείαν*, in characters which seem to indicate the third century, though in that case it must be the renewal of an ancient inscription. The steps of the altar show places for stelae, and the discoveries in the neighborhood show that this was one of the *ἐπιφανίστατοι τόποι*, and, as might be expected, especially favored by the Chians. Seven inscriptions, some of considerable length, and others very fragmentary, in honor of Chians are published *in extenso*, and, on p. 629, a revised list of the Chian Hieromnemones is given supplementing that of Pontow (*F.D.* 517, 834). To some of these it seems possible to assign approximate dates, in the late third and early second centuries B.C.; a time when Chios played a prominent part in the Eastern world. The inscriptions show that the city took care to keep its offering in good repair, and that the altar was in special charge of the Chian Hieromnemon. In the second century, the importance of the altar is shown by the placing near it of the statue with which the Delphians honored Eumenes. The altar seems to have been kept in repair until the latest period of the sanctuary. The last inscription of the Chians is a basis with the inscription: *Ὁ δῆμος ὁ Χίων Φησίῳ | Σευθίνου Χίων | Ἀπόλλωνι Πυθίῳ*, almost identical with *C.I.A.* II, 1171, placed by Köhler a little before the time of Augustus. The situation of the altar seems to have been fixed by earlier usage, for it is in this region that the soil shows a mass of ashes containing in regular layers fragments of bronze and terracotta extending from the sixth century back into Mycenaean times, and reaching to the virgin soil.

(4) Inscriptions of the Lesche of Cnidus. The indications of the position of this building in Paus. X, 25, 1; 26, 4, are not very distinct; but the situation, to the right and above the spring Cassotis, has been determined by an inscription (*Κνιδέων ὁ δῆμος τὸ ἀνάλαμμα Ἀπόλλωνι*) in a retaining wall. In this neighborhood have also been found other inscriptions giving the proxeny to Cnidians, two of which are published in full. The retaining wall could only have been built by the Cnidians for an edifice in which they were particularly interested, i. e. the Lesche. On the terrace have been found the foundations of a rectangular building, which seems to have been destroyed by an earthquake or violent inundation of the torrent

Rhodini. On the north side, the building is protected by the polygonal wall of the temenos. It was not accessible on the short sides, at the east and west. The terrace is only a little longer than the building, but it is 3.28 m. broader, so that it was on the south side, which alone was accessible, that the building received light. It was a rectangular structure, closed on all sides, but, perhaps, with several doors on the south. Inside, eight columns, probably of wood, supported the roof. It was probably lighted by windows. It was not a portico or treasury, but a large hall giving to the painter the largest wall space under the best conditions of light. The paintings began at the entrance, and ran along the side walls, and then across the back. A discussion of their arrangement is promised by M. Homolle. The Lesche enables us to determine the position of the tomb of Neoptolemus, of which no trace seems to have survived, but which must have been near the great group of nine Thessalian princes.

An Athenian Dedication at Delphi.— March 11, 1896, M. Colin presented at the French School a discussion of an inscription found at Delphi, in June, 1895. It is on a base of gray limestone which once supported a tripod, and, owing to the roughness of the stone and the shallow cutting, is by no means easy to read. It is a dedication by the Athenian Demos to Apollo, made by ten Ἱεροποιοὶ οἱ τῇ Πυθιάδι ἀγαγόντες. These cannot be either of the boards of ten mentioned by Aristotle (*Pol. Ath.* 54), but a specially elected commission, perhaps chosen for their connection with Delphi, or their wealth; for among the names are some mentioned by Demosthenes as borne by the richest men in Athens. As Lycurgus is one of the commission, the inscription must be earlier than 324 B.C., and as the name of Demades also appears on the stone, it is probably later than 331 B.C., as only after that date could Lycurgus and Demades be expected to act together. It is possible that the occasion for this embassy was the dedication of the new temple at Delphi. A proxeny decree in honor of Demades has been found at Delphi, headed by a relief representing Athena, Apollo, and Delphus. (*B.C.H.* XX, pp. 675-677.)

Inscriptions from Delphi.— In *B.C.H.* XX, pp. 466-496, P. Perdrizet publishes the first series of inedited texts relating to the connection of Delphi with Thrace and Macedon, countries concerning which epigraphic documents are rare.

(1) A decree of proxeny in honor of the four sons of Cersebleptes, the famous Odrysian king, of whose descendants nothing was hitherto known, except that one son had been a hostage at the court of Philip of Macedon. This inscription names Iolaus, Poseidonius, Medistas, and Teres, who alone bears a Thracian name. The inscription agrees with one from the Acropolis (*C.I.A.* IV, 2, 65 b) in the spelling *Κερσεβλέπτης*, which is to be preferred to the form *Κερσοβλέπτης* found in the MSS. The date of the decree is probably 351-350.

(2) A decree of proxeny in honor of Nearchus, son of Androtimus the Cretan, who is the well-known admiral of Alexander. The inscription confirms the statement of Diodorus (XIX, 69, 1) and Arrian (*Ind.* 88), and

shows an error in Stephanus Byzantinus. Perdrizet inclines to the opinion, that not Nearchus but his father came from Crete to Amphipolis.

(3) A decree of proxyeny of the fourth century in honor of a citizen of Europus in Macedon. Two towns of this name are known, one on the Axios and the other on the Rhodias. The former was the more important, and is probably the place meant. *Μαχάρας*, the person honored, bears a name well known in Macedon, as it was borne by the family which ruled the Elymiotis as the vassals of the king of Pella. His father's name, *Σαβαρράπας*, is new, but seems formed from the name of the Thracian god Sebadius.

(4) A long inscription conferring the proxyeny and other honors on Cotys, son of *Πάϊζδος* (*Ῥάϊζδος*, *Ῥάϊζδης*), which cannot be later than 201 B.C., and seems to belong to the latter part of the third century. Two kings of this name are known, one the father of Cersobleptes (382-358 B.C.), the other Cotys II, an ally of Perseus against the Romans. Each of these kings was the son of a Seuthes. The Cotys of the inscription may well be the grandfather of the enemy of the Romans. Two facts seem clear from the inscription: (1) The Odrysians regained in great measure their independence during the wars after Alexander's death. (2) They were governed by the family of their ancient kings, as is clear from the fact that this decree renews a proxyeny already granted to the family, a reference probably to the honor given the sons of Cersebleptes and their descendants. As intermediary in showing the good-will of the king, there is mentioned Tyrillus (the name is new) of Neapolis, the nearest Macedonian city to the Odrysians. The father of Cotys bears a Thracian name, perhaps identical with that of the king of the epic, whose name has been hellenized into the form Rhesus.

(5) The dedicatory inscription of Q. Minucius Q. f. Rufus to the Pythian Apollo was copied by Cyriacus, and has since disappeared and been rediscovered several times, for the last time by the French in 1896. With this inscription are to be connected two others: one, a fragment of a Delphian decree in honor of a Minucius, son of Quintus, for his bravery against the Scordistae and other Thracians. This cannot be the legate Q. Minucius, but M. Minucius Rufus, who, in 109 B.C., as proconsul, made a victorious campaign in Thrace. His brother was Q. Minucius, and together they were appointed by the senate, in 117 B.C., to settle a controversy, in which their decision is still preserved (*C.I.L.* I, 199). The other inscription is from the base of a statue evidently erected in honor of the proconsul. It may well be combined with the fragment just mentioned, as both are of the same stone, and gives the following dedication:

Μενεκράτης καὶ Σώπατρος Θηβαῖοι ἐποίησαν.

M. Minucium Q. f. Rufum

imperatorem, Galleis

Scordisteis et Besseis.

[Μάαρκον Μενύκιον Κοῖντρον υἱὸν Ροῦ]-

[φον, ἀνθύπα]τον Ρωμαί[ων, νικήσαντα]
 [Γάλλους Σ]κορδίστας [καὶ Βέσσους]
 [καὶ τοὺς λ]οιποὺς Θραί[κας ἀ πόλεις]
 [τῶν Δελφ]ῶν ἀρετᾶς ἐν[εκεν]
 [Πυθίω]ι Ἀπόλλωνι.

The artists are otherwise unknown.

The Scordistae were a Celtic tribe established in the valleys of the Illyrian tributaries to the Danube. Of their government we know nothing; but as their chiefs are never named in the inscriptions, they do not seem to have had a king. They were noted as the fiercest and most crafty of the Thracian tribes. They carried their incursions west to the Adriatic, east as far as Olbia, while on the south their raids had formed a desert along the Macedonian frontier. Even before Macedon became a province, the Romans had met this tribe with but little success, and in 114 the consul in charge, C. Porcius Cato, was disgracefully defeated. These attacks of the Scordistae are contemporary with the advance of the Cimbri, but the exact connection cannot be determined. The Roman defeats led to more energetic action, which seems to have culminated in the campaign of Minucius in 109 B.C. This punishment seems to have kept the Scordistae quiet until the advance of Mithradates, whom they joined in the pillage of Delphi and Dodona. Sulla's campaign of 85-84 again checked them, but in 77-76 they were again in arms against Appius Claudius, and in the following year C. Scribonius Curio gained a triumph over them. Again, in 16 B.C., they ravaged Macedon, but four years later were allies of the Romans in Pannonia, and after that time the imperial power was sufficient to restrain their raids, while, like the other neighboring tribes, they gradually disappeared in internal wars, though they survived even to the time of Ammianus Marcellinus.

Greek Shorthand. — In *B.C.H.* XX, pp. 422-428, pl. viii, P. Tannery publishes two fragments found at Delphi, which contain a key to an unknown system of shorthand. The stones are so much mutilated that it is impossible to reach any certain conclusion as to the systems; but it seems clear that we have to do less with *tachygraphy*, i. e. a system intended to economize time, than with *brachygraphy*, where space is to be saved. The two stones represent different systems, and in general raise more questions than they answer. Tannery gives a summary of the combinations which can be made out, but does not attempt any final discussion, contenting himself with opening the way to other attempts at interpretation.

The Pythian Apollo at Athens. — *B.C.H.* XX, pp. 639-641, contains a summary of a paper read by M. Colin at the meeting of the French School in Athens, February 12, 1896, on the worship of the Pythian Apollo at Athens in the second century according to the inscriptions of the treasury of the Athenians at Delphi. A considerable number of these documents relate to the solemn embassies sent at intervals by the Athenians to honor the god. These documents are of two kinds: (1) Decrees by the

Delphians in honor of persons connected with these missions; (2) lists of the ambassadors. These show at the head two groups, one of magistrates, the other of the general ἐπὶ τὰ ὄπλα and the priests, then a large body of Theori and Pythiasts, with an escort of ephebi and horsemen, and a number of women, including the priestess of Athena Polias. To the religious ceremonies were added contests, — hippic, musical, and dramatic. While the festival is celebrated by the whole Athenian people, the names show that the old families of the Paralia and Tetrapolis were very prominent. During the second century B.C., the old antagonism of Dorian and Ionian had died out, and the old piety toward the gods showed itself at both Delos and Delphi.

Eleusinian Inscription. — D. Philios has commented on the Eleusinian inscription published by Skias (Ἐφ. Ἀρχ. 1895, 110-114). It is a decree in honor of F. Flavius Leosthenes Paeanicus, whose father, grandfather, and brother had been eponymi, and whose family is known also from C.I.A. III, 656. The following points are noticed: the formula ἱεροφαντοῦντα ἐπὶ γένους λαμπρότητι, which seems to show that the ἱερωνυμία under the empire was not very strict; the initiation of L. Aurelius Verus; and, above all, the celebration of the mysteries twice in a single year. (*B.C.H.* XX, p. 657.)

The Corinthian Alphabet. — In *Athen. Mith.* 1897, pp. 343-344, P. Kretschmer discusses the secondary signs in the Corinthian alphabet. Ξ = ζ as in Thera. Ψ = ψ. These were both derived from the Ionians.

Musical Contests for Boys. — In *Athen. Mith.* 1897, pp. 334-342, Th. Preger writes of the musical contests for boys in Sparta. He gives a collection of the inscriptions referring to these Spartan musical *agones*. The instrument depicted on the tablets is shown to be a sickle, which is to be regarded as the emblem of Artemis Orthia, who appears in Alcman's famous *partheneion*.

A Tegean Dedication. — A dedication by the city of Tegea to the emperor M. Aurelius has been copied at Palaeo-Episcopi. (*B.C.H.* XXI, p. 148.)

King Nabis. — In the Museum at Sparta is part of a clay tile with the inscription ΒΑΛΕΟΞ | ΝΑΒΙΟΞ = βασιλέως Νάβιος. The abbreviation is according to a common method, for which many examples are cited. The title βασιλεύς is not given to Nabis in our literary sources, where he is always called τύραννος; but that he claimed it is clear from the dialogue with Flamininus (Liv. XXXIV, 31). This indicates that it was assumed before 197 B.C., though not recognized by the Romans until the conclusion of the treaty with him. As Nabis was the enemy of the Achaean League, which was in alliance with Rome, the treaty was later disowned by the Romans, who asserted it was made with Pelops, the legitimate king, whom Nabis had supplanted (Liv. XXXIV, 32, 1). Pelops was the son of Lycurgus, who succeeded Cleomenes III, and dethroned the minor Agesipolis, his associate king. Pelops must have been the nominal king under the guardianship of Machanidas and later Nabis, who soon put the boy aside and assumed the royal power. It is an easy supposition that both Machanidas and Nabis

were connected with the royal family, and thus had some natural claim to the power. The treaty with Pelops must have reference to the Aetolian league of 211 B.C., which the Spartans joined in 210 B.C., after the death of Lycurgus.

The Delian inscription in honor of Nabis (*B.C.H.* 1896, pp. 502 ff.) shows, as Homolle has said, that he was son of Damaratus and of royal blood, and that the Romans had no objection to the Delians giving him the title of king. As to Machanidas there is no new light.

The tile is very probably a fragment of the upper part of the wall with which Nabis fortified Sparta; the lower part would be of sun-baked brick. (P. WOLTERS in *Athen. Mitth.* XXII, pp. 139-147.)

In *B.C.H.* XX, pp. 502-522, Th. Homolle discusses King Nabis in the light of evidence derived from inscriptions of Delos, which throw light on two points misrepresented or ignored by the historians,—his title and his origin. The tile from Sparta gives him the title "king," and this is confirmed by the Delian decree. The stele of Delos is distinguished by its size, the excellence of the execution, and by the rarity of the material, which is red Laconian marble. It contains a decree of proxeny in honor of βασιλεὺς Νάβις Δαμαράτου Λακεδαιμόνιος, and is easily read and absolutely perfect, with the exception of the last line containing the patronymic of the president of the assembly. Its value is only in the words quoted, as the rest of the document contains only stereotyped phrases. Λακεδαιμόνιος is the term for citizens of Sparta, and Nabis was therefore neither a mercenary soldier nor a Perioecus, but a member of the privileged class. The name of his father recalls the banished king of the fifth century, whose descendants were still living in the district given him by the Persian king as late as the time of Aristotle, whose daughter married a Procles, and whose grandsons Damaratus and Procles were pupils of Theophrastus. Between the grandsons and the father of Nabis there is only room for two generations. One of these generations seems represented by Damaratus, the friend of Lysimachus, who was also honored by the Delians in a decree which may be dated about 295 B.C., as the events of that time, when Sparta was appealing to Lysimachus against Demetrius, furnish the best explanation for the activity of a Spartan at his court. Gorgion, the father of this Damaratus, bears the name of a descendant of Gongylus the Eretrian, who with Damaratus was honored by the Persian king with a domain in Asia Minor. The families are united in Xenophon's account (*Hell.* III, 1, 6; *Anab.* VII, 8, 8), and the occurrence of these names is a strong proof that the Damaratus of the inscription was a descendant of the former king. As the inscription refers to services of the ancestors of Damaratus, it is perhaps not too rash to see in this an allusion to the sparing of the island by the Persians, a deed which may well have been due to the influence of the Spartan king. The patriotic conduct of the descendants of Damaratus in the time of Thimbron would easily pave the way for a return of part of the family to Sparta, where they seem to have reached high esteem, though the earliest opportunity for regaining the lost position came first at the

death of Machanidas, when the royal power, which had fallen into feeble hands, might naturally seem to belong to a Heraclid. That Nabis claimed such rights is clear from the figure of Heracles and the stars of the Dioscuri which appear on his coins, and that his royal position was recognized by the god is clear from the decree. The decree was moved by Charilas, son of Aristothales, and the president was Anticrates, son of Tele(mnestus). A Charilas was archon in 220 B.C., and an Anticrates between 220 and 215 B.C. The palaeographic evidence points to a date between 201 and 197 B.C., as the writing differs markedly from the specimens of 220 B.C. and 193 B.C. Delos at this time was under the influence of Rome, or Perseus, and Nabis could only be honored with the consent of one of these powers. Moreover, from 204-195 is the period of the sea-power of Nabis. In 197 B.C. the alliance of Nabis was important for both Philip and Rome, and both made him rich offers, resulting finally in a treaty with Flamininus, which was thrown aside in 195 B.C., when the Roman victory had rendered Nabis useless.

Another Delian inscription, also on red Laconian marble, in the same writing as the decree of Nabis, is in honor of two Cretans. Nabis had close relations with Crete: Nabis therefore was a descendant of the divine and royal family of the Heraclidae, and was recognized as king by the Delian god and the Romans.

Two other Delian inscription — one on red marble of the time of Nabis — in honor of Lacedaemonians are also published.

Inscriptions from Cleitor. — In the *R. Ét. Gr.* 1897, pp. 279-308, M. Holleaux discusses the two inscriptions published by Milchhöfer, *Athen. Mith.* VI, p. 304, and supplementary pl. i, and by E. Sonne, *De arbitris externis quos Graeci adhibuerunt*, etc., Göttingen, 1888. Several new readings are proposed, the relations between Demetrias and the Federation of the Magnetes are discussed, and the date of the inscriptions is seen to be between 167 and 146 B.C.

Inscriptions formerly in Aegina. — In *Athen. Mith.* XXII, 1897, pp. 349 f. M. Fränkel publishes an appendix to his article in the *Abhandlungen d. Berl. Akad. d. Wiss.* entitled *Epigraphisches aus Aegina*, in which the origin of inscriptions formerly in the museum at Aegina is discussed.

Inscriptions from Melos. — Forty-six Melian inscriptions, found or copied by the members of the British School, are published in reduced facsimile by Cecil Smith, *J.H.S.* 1897, pp. 1-21 (3 cuts). All but four are new. The first twenty-three, belonging to the period before the Athenian occupation in 416, are in the Melian character, the earlier ones having the five-barred μ , the horizontal σ , etc. The semicircular o is found with the later forms of μ and σ . ψ is shown to be Melic for ψ , not ξ . ρ occurs once in the usual form. Where coloring remains in the letters it is red, and in some instances it occurs in consecutive lines. The greater part of these inscriptions are fragments of epitaphs on stelae of the dark red trachyte, used also for building in this period, which had, when complete, a pediment-shaped top, with the inscription on the smoothed surface immediately below. The back and lower part are left rough, as if for setting in the

earth close in front of the tomb. The common form of tomb is a chamber either cut into the rock at the side of the road or sunk in the ground. One of the inscriptions, with the red color of the letters still bright, was found eight feet below ground, among the remains of a late Roman stoa, indicating that the plundering of the tombs for building material began early. If the tradition is to be trusted, one of the inscriptions of the best period was found in the same tomb as the Gigantomachia vase of the Louvre, which suggests a date of about 430. Of the early inscriptions not on stelae, one, with a woman's name, is cut in the wall above a burial-niche, in a rock-cut chamber-tomb, and two, reading *Διὸς Καταβάτα*, are cut on natural rocks roughly shaped like altars, and mark the spots as under the protection of Zeus who descends, Zeus Kataibates.

Of the later stelae, two have the inscription at the bottom of the face, and when compared with another, which has a relief on the upper part and no inscription, suggest that the upper part, which shows traces of red paint, was reserved for a picture. These three all terminate below in a square shaft for setting into a socket. They belong to the first half of the fourth century B.C., and appear to be relics of the Athenian colonists who settled here in 416. No native Melian stones are known later than the fifth century, until one comes to Imperial times; but the cause of the gap has not been discovered. Two of the late inscribed stones, an altar dedicated to Dionysus Trietericus, and a herm-statue of a priest, set up by the *mystae* suggest a cult of Dionysus Bassareus. The herm and the mosaic pavement on which the two were found will be published. One stone names a man as *ἄχρων Μηλίων* for the third time, τὸ γ. Another is on the pedestal of a statue of Agrippina the elder. Another, compared with two already published in the *C.I.G.*, supplies gaps in the family trees of a certain Damaenetus and his wife Cleisagora. The latest inscription, on the ambo of a very ancient church, invokes the care of Saint Theodore.

New Fragment of the Marmor Parium.—The newly found fragment of this important inscription is published by M. K. Krispi, and edited by A. Wilhelm, *Athen. Mitth.* 1897, pp. 183-217. The fragment records the events occurring between the death of Philip II, 336-335, and 299 B.C. It is dated by Athenian archons with statement of the years that have elapsed since 264. Flach's conjecture that this marble in the last period dealt more particularly with Parian affairs, is shown to be incorrect. The stone is in a poor state of preservation, and does not add much to our knowledge of the period. Some of the chronology is wrong. Aristotle is called *σοφιστής*, whereas, in the part previously known, Socrates and, perhaps, Plato were called *φιλόσοφοι*. Aristotle is said to have died at 50, instead of 63 years of age.

Archaic Parian Inscription.—The archaic inscription of Paros (*B.C. H. XXI*, p. 16), which forbids Dorians to sacrifice to Cora, may be compared with Hdt. V, 72, where Cleomenes is a Dorian is forbidden to enter the temple of Athena on the Acropolis. (*B.C. H. XXI*, pp. 148-149.)

New Amphora-stamps.—In *Athen. Mitth.* 1897, pp. 148-158, E. Eridik publishes some amphora-stamps from Rhodes, Cnidus, and Thasos, now in

Athens. He accepts Keil's view that the manufacture of these objects was controlled by the state, and that it was a monopoly. The head of Helios and the flower are the official Rhodian stamps.

Epigraphical Notes.—In the *Athen. Mith.* XXII, 1897, pp. 381–386, St. N. Dragoumes has some brief notes, with new readings, on inscriptions published Δελτ. Ἀρχ. 1890, p. 145; Ἐφ. Ἀρχ. 1894, pp. 172–179, 241–244, 195–198, 1895, pp. 61–76, 89–92, 99, and 103 (Dionysus παραταίρων = μανόμηνος; cf. Dionysus δάλλιος in Samos).

Cretan Inscription.—In *Athen. Mith.* 1897, pp. 218–222, E. Ziebarth shows that the inscription *C.I.G.S.* III, 693, is Cretan, not Coreyean. The document is referred to Cydonia. In l. 3, the name Lygdamis occurs.

Inscriptions copied by Cyriacus of Ancona.—In *Athen. Mith.* XXII, 1897, pp. 113–138, E. Jacobs gives a corrected arrangement of the pages of the *Codex Vaticanus* 5250, and the text of some of the inscriptions collected in 1444 during Cyriacus's stay in Thasos, together with copies made from the stones now in the island. One inscription may date from 411–410 B.C., when Thasos was under the control of the Lacedaemonian oligarchy which proscribed the sympathizers with Athens. In *Athen. Mith.* XXII, 1897, pp. 405–414, E. Ziebarth publishes, with notes, some inscriptions copied by Cyriacus. They are chiefly late inscriptions from Delos, Naxos, Myconos, and other islands. One is in honor of "Aphrodite and her son Eros."

Law against Money-changers at Mylasa.—In 1895 M. Briot discovered at Mylasa, in Caria, and published in *B.C.H.* XVIII, p. 545, a fragmentary inscription of considerable length. This document has been republished with restorations and commentary by Th. Reinach in *B.C.H.* XX, pp. 523–548. The stele is broken on all sides.

The subject of the inscription is the action of the council and people of Mylasa to put an end to some financial abuses which had caused great distress. The first nine lines seem to be a sort of preamble, containing the reasons for the decree. Then follow the names and titles of the emperors under whose auspices the law is enacted. These are Septimius Severus and his two sons, so that the date is fixed in either A.D. 209 or 210. The object of the law is to prevent unauthorized money-changing. The right of exchanging money seems to have been a monopoly at Mylasa, as in some other Greek cities. The law provides for the arrest, on complaint of any citizen, of any one who, without authority, changes money, and his trial before magistrates and council. If he has charged no commission, his good faith seems assumed, and he merely forfeits the sum concerned, which is divided between the authorized banker and the complainant. The other party to the transaction seems to have gone free. If he has charged a commission on the exchange, he is treated as a criminal, and pays a heavy fine to the emperor, the people, and the complainant, and the sum concerned goes to the banker. A slave is punished by a flogging and imprisonment for six months, unless the master refuses to surrender him, in which case the owner is held guilty and fined. The last clause of the law provides for the publi-

cation of all complaints, for the punishment of the magistrates for any neglect of duty, and for the recording of the decree as a permanent law. Then follows a more fragmentary portion which seems to contain a part of the peroration of the original mover of the decree, from which it appears that the operations of unauthorized money-changers had diminished the supply of coin, and particularly of small change (κόλλυβος), to such an extent that the inhabitants could not buy the necessities of life, and the receipts of the imperial treasury had fallen off. This was approved by the hearers, for here follow the words *succlamatum est*, a seemingly unparalleled insertion of Latin in a Greek document, though "applause" is found in other Greek inscriptions in imitation of the *acta publica* of the Roman senate. The analogy of such texts, which have been found at Athens, Chalcis, and Pozzuoli, make it probable that the Mylasa decree was incorporated in the speech of a magistrate.

The cause of the trouble at Mylasa is to be found in the debasement of the silver coinage by Severus. This led to the collection and hoarding of the old *denarius* for foreign commerce, and even to the hoarding of bronze coin. Such remedies as those tried by the council of Mylasa failed to touch the root of the evil, and matters continued to grow worse, until the edict of Diocletian introduced a new era in the history of money.

Inscriptions from Gordium and Vicinity.—As supplement to his article on the site of Gordium, A. Körte publishes in *Athen. Mitth.* XXII, pp. 28-51, a number of inscriptions collected by him along Manlius's line of march from Synnada to Gordium. Of the thirty-eight, twenty-seven are grave inscriptions, of which Nos. 3, 19, and 28 are metrical. Number 19 is also striking from the late forms of the letters, and the wild orthography of the Greek. It is only in part restored. Seven are honorary, and of these only No. 23 is noticeable as recording the career of a certain Heras of Pessinus, who not only held many honorable and expensive offices in his native land, but also served as *tribunus* in two legions, both of which are known to have taken part in the siege of Jerusalem by Titus. As he received the *hasta pura* and *corona muralis*, it seems likely he took part in this campaign. This inscription also gives a new name for the mystae of Cybele, Ἀτταβοκαοί, where the last element is of uncertain origin. Number 25 contains fragments of two letters of Trajan, in which he expresses thanks for τριμίστων ζεύγη δύο and φιβλατώρια (*fibulatoria*) δύο, sent him apparently by a Pessinuntine weaver. Three are votive inscriptions: No. 6 to the Mother of the Gods; No. 8 to the Papas (?); No. 9 to Heracles.

Ptolemaic Documents.—In *B.C.H.* 1897, pp. 184-208, P. Jouguet publishes three inscriptions from Ptolemais, which prove that this Egyptian city had a right to be called a πόλις. It had a βουλή, an ἐκκλησία, tribes, and demes, *c. g.*, Bereniceus, Philotereius, Danaeus. The constitution of Ptolemais as set forth in the inscriptions is probably that of the first period of the Macedonian conquest. One document records the turbulence created in the senate and assembly by certain of the citizens. Some of the inhabitants are called νεώτεροι.

Greek Inscriptions from Egypt.—In *B.C.H.* XX, pp. 459-466, P. Jouguet publishes some metrical inscriptions in the Museum of Gizeh, from the neighborhood of Edfou (Apollinopolis Magna). Two of these have already been published (*B.C.H.* XX, pp. 191 ff.), and for these only some corrected readings and translations are given. Some details seem to indicate the Ptolemaic period, and the mention of a war in Syria points to the reign of Philadelphus I or Euergetes I. The third inscription consists of thirteen elegiac couplets, of which the first six are badly mutilated, the others but slightly damaged. They contain the epitaph of a certain Apollonius, who had been publicly honored by the kings. The author is the same Herodes who signed the epigrams already published. The fourth is a badly mutilated fragment, which may be in either hexameters or elegiacs. It appears to contain the epitaph of a Samothracian, who had served in the Egyptian army. The title ἡγεμὼν ἀνδρῶν points to the Ptolemaic period. The writing differs slightly from that on the other stones, but it seems probable that it comes from the same place at which there appears to have been a cemetery of Greek soldiers.

Greek Inscription from Syria.—M. Fossey has corrected the copy of an inscription from El-Burdj in Syria, published by Clermont-Ganneau (*Recueil d'archéol. orientale*, II, p. 61). He has shown that the word ἀποθεωθέντος has been wrongly considered as alluding to human sacrifices, and that the name Σεγερῶν corresponds to the Semitic Se'ira, probably the ancient name of Kala'at Jeudal. (*B.C.H.* XX, p. 657.)

COINS

Notes on Additions to the Greek Coins in the British Museums, 1887-1896.—On the reverse of a bronze coin attributed to Chalcidice, is a nude male figure with wings, running, and holding a wreath in each hand. It may be a personification of Agon.

Two Euboean (?) coins are here, of a series on which horses are represented in front view. The tetrobol has a single rider, the octobol, a rider leading a second horse, and the tetradrachm, a quadriga. In the quadrigae, the horses turn their heads toward each other, in pairs.

A coin of Aegium in Achaia has the infant Zeus suckled by the goat Amalthea. A legend connecting the name of the town with this incident, Αἴγιον from αἰξ, is given by Strabo, VIII, p. 387.

A coin from Pheneus in Arcadia bears, apparently, the word εὐχά, as if made to be dedicated at the shrine of Hermes, the patron god of the town. ΑΝΑΘ for ἀνάθημα has already been noted on coins. The Hermes on the obverse has Polyclitan proportions.

A Bithynian coin of Domitian or Trajan has a figure of Homonia accompanied by a serpent, as if the type were blended with that of Hygieia.

On a gold coin from Lampsacus, a head having a small wing attached to the neck as a symbol has been called Eros, but more probably, from its feminine character, it is Nike or Iris.

An Ionian coin, of the seventh or possibly early sixth century, has two heraldic lions, with heads reverted and paws resting on a column, suggesting the Mycenaean lions.

On an Ephesian coin of Antoninus Pius, the ἀπήνη, here called *ἱεραπήμη*, the carriage in which the image of the goddess was carried in procession, is drawn by four horses and has a canopy supported by pillars.

A coin of Cnidus has a head of Aphrodite Euploia, unusually close to the Praxitelean type. (G. F. HILL, *J.H.S.* 1897, I, pp. 78-91; 1 plate.)

The Waddington Collection.—In *R. Num.* 1897, No. 4, E. Babelon continues the description of the Waddington coins now added to the Cabinet des Médailles. He describes those of Ionia, Caria, and the adjacent islands. Two plates.

The Monument of Themistocles at Magnesia.—A bronze coin of Magnesia, of the time of Antoninus Pius, shows Themistocles standing, nude, before a blazing altar over which he holds a phiale, while a bull, just slain, lies at his feet. It is evidently copied from the heroic monument erected by the Magnesians to Themistocles as their ἀρχηγέτης. As the proportions of the figure, with narrow hips, are too archaic for the fourth century, the original heroön must have retained its old position in the agora when the city was remodelled, soon after 400 B.C. The date of course excludes the possibility of portraiture. The scene is a typical heroic sacrifice; but the presence of the bull and the phiale, appropriate to it as such, may have given color to the tradition (Arist. *Eg.* 84) that Themistocles was poisoned by drinking ox-blood.

The other of the two monuments mentioned by Nepos, *sepulcrum prope oppidum in quo est sepultus*, was not a tomb near Magnesia, but the tomb at the Piræus. In the epigram of Diodorus of Sardis (*A. P.* VII, 74), we should read, not τοῦτο Θेमιστοκλέϊ κενὸν ἥριον, but Θेमιστοκλέους ὑπὲρ ἥριον. The absence of any allusion in this monument to his services in behalf of Greece accounts for the feeling shown in this epigram and the other three on the same subject (*A. P.* VII, 235, 237, 73), all written by men who were interested in such works of art. (M. RUBENSON, May [1897] meeting of Berlin Arch. Soc. *Arch. Anz.* 1897, III, p. 131 f.)

Tripolis in Syria.—**Eras established by Coins.**—J. Rouvier has established from coins of Tripolis in Syria three eras in use in that city: the Seleucid era, an autonomous era beginning in 105 B.C. or 156 B.C. or 112 B.C., and the era of the battle of Actium, beginning in 31 B.C. This last appears on a series of coins of Tripolis, running from the year 1 to the year 29 of the era. (*C. R. Acad. Insc.* 1897, pp. 429-431.)

MISCELLANEOUS

Egyptian Painting and the Mycenaean Question.—In the *Sitzungsber. d. Mün. Acad.* 1896, pp. 539-582, W. Helbig discusses the paintings from a tomb in Thebes belonging to the eighteenth dynasty (published *R. Arch.* XXVII, 1895, pls. xiv, xv, pp. 286-292), especially the representations

of foreigners called Kefti. He shows that the Kefti are Phoenicians, and that the Phoenician trade and naval power was great at the time of the eighteenth dynasty. Objects of "Mycenaean" art are found in Egypt, especially in centres of Phoenician influence; the "Mycenaean" costume agrees with that of the Phoenician Kefti; the Homeric poems, which depict in many respects the civilization of the "Mycenaean" age, show us the Phoenicians as the great artists and artisans of the period. All this shows that the culture of the "Mycenaean" age was Phoenician. After the Dorian invasion the Phoenician influence in Greece was almost done away with. The Oriental influence that appears in Greek art in the eighth and seventh centuries B.C. is exerted by Asia Minor rather than by Phoenicia. Helbig's arguments are stated with much detail and supported by many references to works of art and literature.

The Pelasgians.—In the *Nation*, October 28, 1897, W. J. Stillman claims the honor of having originated the theory that the pre-Hellenic civilization of Greece was Pelasgic, and refers to a paper submitted by him to the Archaeological Institute of America some ten years ago, but never published. He believes that the Pelasgi entered Italy by going round the Adriatic from the lower Balkans, settled in Tuscany, and spread south to Sicily and east to the opposite shores of the Adriatic. Thence they passed south, occupied Peloponnesus, and reached Asia by way of Thrace as well as by way of the islands. An important seat of their power was in Crete. Mycenae was also Pelasgic. At Mycenae the remains showing traces of the use of the stone-saw and the tube-drill are not earlier than the eighth or even the seventh century B.C. Any cut stone is still later. The source of the so-called Mycenaean art is to be sought in Crete, but it is Pelasgic.

Mosaic at Melos.—**The Pelasgians.**—At a meeting of the Hellenic Society, February 24, 1898, drawings of the fine mosaic found in Melos by members of the British School at Athens were exhibited. Professor Ridgeway gave an address on some of the chapters of his forthcoming book, *The Early Age of Greece*. He briefly reported the results at which he had arrived in his paper, 'What People made the Objects called Mycenaean?' (*J.H.S.* 1896), and maintained that these objects were the work of the Pelasgians. These he believed to have been a dark-haired people, while the Achaeans of Homer are described as fair-haired. The Pelasgians recognized descent through women, and their worship was one of totemism and fetishism. Poseidon was a god of this early people, who was gradually driven out by Zeus and Apollo. A discussion followed, in which Messrs. Anderson, Percy Gardner, and Farnell took part. (*Athen.* March 5, 1898.)

Mycenaean Datings.—In the *Nation*, March 10, 1898, W. J. Stillman argues from the use of chisels in the relief of the Lions' Gate at Mycenae, that the relief cannot be earlier than the eighth century. He accepts the belief expressed by Nicolaides, *Εφ. Αρχ.* 1894, Part 3, that the fragment of a silver vessel found at Mycenae has upon it a representation of the siege of Troy. Stillman assigns this relief to a period not later than the sixth century B.C. Stillman argues that the tombs at Mycenae were plundered and

used by Gauls, and cites the statement of Diodorus Siculus (*The Virtues and Vices*, ed. A. F. Miot, *Diodore de Sicile*, vol. 6, p. 490) that Pyrrhus left a Gaulish garrison at Aegae, and that these Gauls pillaged tombs. Stillman further argues that the remains of the palace of Tiryns, showing the use of the stone-saw and the tube-drill, cannot belong to the pre-Hellenic period.

The Remains at Gha.—In *B.C.H.* XXI, pp. 149-151, de Ridder replies to the note of Noack in *Jb. Arch. I.* IX, 219-221. He explains some discrepancies in the two plans *B.C.H.* XVIII, pls. x, xi, and reaffirms his belief in a fortified camp at the foot of the hill at Gha, though claiming that the defences were very simple, and intended to be strengthened in time of war. He also insists that there is as yet no evidence for identifying Gha with Arne.

Some Antiquities of the Mycenaean Age.—Among the antiquities of the Mycenaean age, recently acquired by the British Museum, are the following:

Sixteen gems from Cyprus, Crete, Melos, the Peloponnesus, and even Calabria, including: (1) A seal of rock-crystal, from Cyprus, with rim of gold wire, gold-lined hole piercing it, and swivel of twisted gold wire for suspension. The design, of markedly Mycenaean character, is a sea-urchin between two stiff trees, a tunny fish above. (2) An agate chalcidony from Crete, one of the finest island gems known, engraved with a bull in profile, guided by a man who stands facing on the further side. The man, with pinched waist and loin-cloth, is less well rendered than the bull. The style closely resembles that of the Vaphio cups, and is certainly free from anything oriental. (3) A carnelian from Hydra, with subject connected with animal-worship (v. *J.H.S.* 1894, pp. 81 ff). In the centre is a figure, wearing a horse-skin, which covers his head, is tied in at the waist, and hangs to his feet behind. Two other men, wearing only the loin-cloth, stand on either side and converse with him, raising the hands in gesture. The style resembles that of the Cretan gem. The scene represents the worship of the chthonian horse described by Pausanias in connection with Phigaleia, and the man clothed in the skin is a worshipper, like the *arctoi* at Athens, who wore bear-skins in honor of Artemis Brauronia. (4) A hematite, already published, which shows a bull led by two men, one at his head, and one apparently meant to be on the further side, but really in the field over his back. It is interesting in comparison with the Tiryns fresco. (5) A steatite gem, engraved with the gorgoneion of the archaic Greek type, with protruding tongue and tusks.

A collection of thirty-four vases, from a cemetery near Nicosia, in Cyprus, chiefly of the earlier period of the pottery from Cypriote bronze-age tombs, and corresponding with the remains of the second city at Hissarlik. They are red and black glazed hand-made ware, having incised geometric patterns, filled with white. In the second period, imported Mycenaean vases are found, with local hand-made bowls, covered with white slip, on which patterns were painted, and with jugs of thin clay and metallic surface, on which snake- and cable-patterns are painted or laid on in relief.

A remarkable Mycenaean vase from Egypt, small and very flat, with three handles, and an argonaut or paper nautilus in each space between the handles, while all the rest of the surface is covered with seaweed patterns. See *Am. J. Arch.* 1892, pp. 437 ff., for similarly decorated vase in New York.

A pseudamphora from Calymna, with bright red decoration on buff ground. An octopus on the front has four tentacles on each side, which run around the vase in approximately parallel lines, joining in pairs at the back, and dividing the sides into wavy bands, in which stand birds and various animals. The spaces between the tentacles, near the body, are filled with curiously interlacing bands of parallel lines.

No new light is thrown on the Mycenaean problem by these articles. Recent excavations in Cyprus only show that this civilization lingered there long after it had been superseded elsewhere. (H. B. WALTERS, *J.H.S.* 1897, I, pp. 63-77; 1 plate, 14 cuts.)

The Homeric Discus.—In the *R. Et. Gr.* 1897, pp. 256-263, A. de Ridder finds that the Homeric discus had no hole in it, and was not hurled by means of a strap. The references to a strap contained in the scholia are traced back to Eratosthenes, but he refers not to the Homeric discus, but to the discus used for a time after the introduction of the *pentathlon* in the Olympic games in 708 B.C. A perforated bronze discus of this kind is in the National Museum at Athens. Its form is such that it could have been hurled only with a strap.

Ancient Theatre-tickets and the Dionysiac Theatre.—At the January meeting of the German Institute in Athens Svoronos spoke of ancient theatre-tickets. These tickets or symbola are little plates of copper with the letters of the alphabet from A to Ω or AA to ΩΩ or even with three letters of the alphabet (AAA to ΩΩΩ). Svoronos explains this by the theory that the Dionysiac theatre was built by Lycurgus, 338-326 B.C., to serve as a meeting-place for the Demus. The theatre was divided into three parts or zones by *diazomata* and these were divided by radii into thirteen wedges or *cunei*. The thirteen parts of the lowest zone were for the voting citizens, according to the constitution of Cleisthenes, about six thousand in number. In the middle of this zone, where were the seats of honor, sat close to the orchestra, the senators; directly over these, *ephebi* and officials. At each side of these were in three stories, in the space of five wedges, the places for the ten tribes of Athens. These three stories of the first zone correspond to the three *trittyes* into which the tribes of Athens were divided. This arrangement had practical importance for voting in assemblies of the people. The urns stood before the first row of seats where were the marble chairs for the *prytanes*, archons, and priests. Each side of the first zone was denoted by one letter of the alphabet; tickets for the second zone had two letters; those for the third zone, three. (*Berl. Phil. W.* February 26, 1898.)

Archaeological Notes on Bacchylides.—In the *Cl. R.* 1898, p. 84, H. Stuart Jones calls attention to the fact that the well-known amphora in the Louvre, No. 194, published *Mon. dell' Inst.* I, pl. liv, represents the same version of the Croesus-myth given by Bacchylides, Ode iii. The same fact

is mentioned by Robert, *Hermes*, 1898, pp. 130-150, and Miss Jane E. Harrison, *Cl. R.* p. 85. Stuart Jones finds that the use of white *engobe* on the vase shows that the painting is "anterior by some decades at least to the poem of Bacchylides." Miss Harrison finds that Bacchylides was not likely to be influenced by the painting of the François vase in his story of Theseus and Minos, Ode xvii. She adds some remarks on the mythological importance of the version of the myth given by Bacchylides.

Theseus and Meleager in Bacchylides.—In *Hermes*, XXXIII, 1898, pp. 130-150, C. Robert discusses some archaeological questions arising from the poems of Bacchylides. The account of the descent of Theseus into the sea is compared with the vase-painting of Euphronius, the *crater* in Bologna (cut), the François vase, and the paintings of Micon in the Theseum. The scene on the François vase does not concern this myth, unless possibly the garment given by Amphitrite to Theseus may be the festal robe in which he leads the dance at Delos. The scene of the *crater* in Bologna is derived from the painting of Micon. The sources of the extant accounts of this myth are discussed. The poem relating to the arrival of Theseus in Athens is of little archaeological interest, except as it shows that Theseus had two companions in his early adventures, and that, therefore, accessory figures in vase-paintings may have mythical significance. The poem about Meleager shows that Meleager lost his life in battle and at the same time by his mother's act. The representation of the sarcophagus, *Ann. d. Inst.* XXXV, 1863, Tav. AB 5, p. 104, may refer to this version of the story.

The Monochord, Instrument of Music.—In the *R. Et. Gr.* 1897, pp. 309-312, C. Ruelle gives a French translation of Ptolemy, *Harmonica*, II, 12, and shows how the simple instrument was played. The pitch was varied by pressing the string against bars fixed at intervals, and the sound was made by plucking at the string with the fingers.

Topography of Delphi.—In *B.C.H.* XXI, pp. 256-420, Th. Homolle endeavors to identify so far as possible the sacred enclosure at Delphi, its entrances, roads, buildings, and votive offerings. There is no attempt at a detailed description of each object, nor a full discussion of the various problems which are connected with a complete view of Delphic topography. The article is in two parts, illustrated by three plans, one (pls. xiv, xv) showing the village of Delphi before the excavations, the others (pls. xvi, xvii) the sanctuary as excavated.

The first part discusses the enclosure, and the second the monuments contained in it. In this portion the paper is almost purely epigraphic.

I. The enclosure. (1) The walls. The description of the situation of Delphi in Paus. X, 8, 9, and Strabo, IX, 3, is accurate. The sanctuary is divided into three regions, separated by the polygonal wall and the wall at the north which supports the terrace of the theatre. The upper and lower of these regions have a decided slope; the middle division contains the temple and forms a great platform. The whole enclosure, including the theatre, has the form of a trapezium, the long sides on the east and west and nearly parallel, the short sides on the north and south and divergent.

On the east and west the sides are 190 m. and 150 m. in length; on the south and north 125 m. and 135 m. This does not take into account the detours made necessary by the ground. The enclosure contains about 20,000 sq. m. The surrounding wall has been laid bare except at the northeast and along the north side, where only the course of the wall was determined, as its complete excavation was considered dangerous. The east wall ascends the mountain in a straight line, broken at one point a little above the temple by a large portico. The wall is in its southern portion of rectangular blocks regularly laid, then becomes polygonal, changes again to somewhat irregular rectangular blocks, and above the large portico is once more polygonal. It has been badly damaged by floods, and in some places is buried under great masses of débris; but its course and structure are clear. The north wall joins the east at an obtuse angle, and follows a straight course past the Lesche of Cnidus, serving at once as an enclosure and as a protection against the earth above. It then bends more to the northwest and ends at the theatre. This wall is not built with regularity, but in general is of small irregular stones, a sort of *opus incertum*, though here and there large curved blocks are found. The west wall is polygonal from the theatre to the lower gate, and from that point to the southwest corner rectangular. It has suffered very badly from its position, and has disappeared near the theatre, so as to leave unsettled the question whether this monument was included in the peribolus. Paus. X, 22, 1, is also ambiguous. From topographical considerations, and also from the prominence of the theatre in religious festivals, Homolle concludes that the theatre was certainly in the peribolus. The south wall is the so-called *Hellenico* and has a general northwest direction from its junction with the east wall. The general style is shown by the popular name, but it is not perfectly isodomic, since as in many other walls there are broken lines and irregular angles. (2) The gates and ways, especially the Sacred Way and its branches. The Sacred Way starts at the gate near the southern end of the east wall, and passes between treasuries and offerings in a northwest direction, parallel to the south wall, until the Treasury of Cnidus is passed, then in front of the Treasury of Athens it turns to the northeast and continues to the east end of the polygonal wall, where it turns due north until the *ex voto* of Gelon is reached, then it turns east and passes along the north side of the temple to the stairway to the theatre, where it ends. Its general shape is that of a reversed S, i.e. 2. There are several branches from this road leading to the gates in the east and west walls, and passing before the treasuries and monuments in other parts of the enclosure. These paths cannot be followed without the aid of a plan and may be omitted here. The Sacred Way is well marked over most of its course, and from the Treasury of Athens to the offering of Gelon lacks but few stones. Its course has not been changed since the sixth century, but there are indications of various alterations in the level, and in the lower portion these seem to have been considerable. The present pavement belongs to the Roman period, and contains many fragments from various sources, including some inscriptions of great value. On account of the steepness of the

rock there are also several staircases, notably one leading to the theatre and another at the portico of the Athenians. A comparison of the excavations with the plan of the village shows that many of the old ways had been preserved, and that the modern agora was near the site of the old centre of the sanctuary, the altar. (3) Management of the water. The situation of Delphi makes it especially exposed to violent floods, which pour down the ravine of Rhodini, and against which special precautions were necessary to protect the enclosure and then to drain the water which might gather inside. As the village grew, and baths were built about the enclosure, more pains were taken to collect this water. Most of the conduits and sewers are of the Roman period, but some go back to the fourth century B.C. Outside, a reservoir was built on the east and a large channel on the west, besides large dykes to prevent the ravine of Rhodini from overflowing. Inside, the upper terrace was so drained that no water would come down to the temple platform, and this in turn was carefully drained. Owing to the situation the lower slope needed less elaborate measures, and gutters along the Sacred Way seem to have been sufficient.

Excavations at the Northern Side of the Acropolis at Athens. — In the *Ἐφ. Ἀρχ.* 1897, pp. 1-32, P. Kavvadias writes of 'Athenian Topography according to the Excavations about the Acropolis' (pls. i-iv; 1 cut). The excavations were begun in the middle of the year 1896, at the expense of the Greek Archaeological Society. Beginning in the depression between the Areopagus and the Acropolis, the excavators advanced along the northern side of the Acropolis, with the intention of examining the ground down to the native rock. The discoveries treated in this article were made for the most part toward the end of 1896, and have already become known, though nowhere as yet so exhaustively treated as here. Above the spring of Klepsydra is a small cave in the rock of the Acropolis, which has usually been called, since Göttling, the cave of Apollo. It is now made clear that the cave of Apollo is the next hollow toward the east, on the north side of the Acropolis. This is made evident by inscriptions found in the excavations, which show that the title of Apollo worshipped here was Apollo *ἰπὸ Μαρμαῖς* and also *ἰπὸ Ἀκραῖς*. This is the cave in which Ion was conceived and exposed. The passages of Pausanias, Euripides, and Aristophanes relating to this cave are discussed. This Apollo was closely connected with the Apollo of Delphi, and it was here, in the neighboring Thesmothesion, that the archons had their official meals. Hence the votive inscriptions once fastened in the niches in and near this cave were dedicated by archons. Just to the east of this cave is a second and larger cavern divided into two parts. This was originally, no doubt, also sacred to Apollo; but after the Persian War, when the worship of Pan was introduced, the larger cave was the cave of Pan. To the east of this cavern a series of steps was found leading up on the surface of the rock to a small gate in the wall, from which a flight of steps led up to the interior of the Acropolis. It was by this way, — hitherto unknown to modern scholars, — that Myrrhine and Cynesias in Aristophanes's *Lysistrata* (911 ff.) propose to descend to the

cave of Pan. Still further east, a long subterraneous passage was found which leads past the foot of the newly discovered stairway, — but without communication with it, — and opens into a cave near the stairs leading up to the Acropolis, near the Erechtheum. The mouth of this cave had been closed by a wall built at the time of the Greek revolution. In ancient times the stairs were approached from the west through the long passage, from the east through the cave. The projecting rocks by the caves of Pan and Apollo, once longer than they now are, were called *μακραι* (sc. *πύραι*), whence Apollo received the designation *ὑπὸ Μακραῖς*. Here was an altar of Apollo, and here also the tomb of Erechtheus, the father of Creusa. Sixteen votive inscriptions set up by archons or clerks of the archons are published. These are all of late date, but evidently once took the place of earlier ones. In a separate article (pp. 87-92), Kavvadias publishes ten more similar inscriptions found later than the rest, — after April, 1897, — and expresses his belief that it was at the altar *ὑπὸ Μακραῖς* that the archons took their oath to Apollo Patroos (Aristotle, *Athen. Polit.* LX, 5). The results of these excavations are described with detailed discussion of topographical features and literary authorities, by Chr. Belger, in *Berl. Phil. W.* September 11, September 24, October 2, and October 30, 1897.

Results of Excavations at Athens. — In the *Berl. Phil. W.* October 30, November 6, November 13, and December 25, 1897, Chr. Belger describes and discusses the recent excavations and investigations in Athens. After treating of the Grotto of Apollo, the Oath of the Archons, etc. (see above), he discusses Dörpfeld's various theories concerning the Erechtheum, the Opisthodomus, and the Parthenon. He reaches the conclusion that the old temple did not, as Dörpfeld maintains, continue to exist throughout antiquity, but was supplanted by the Parthenon. The old temple mentioned in inscriptions is according to Belger the Erechtheum. Belger further discusses the sculptures of the pre-Persian temple, the early waterworks, which Dörpfeld connects with the Enneacrunus, the discovery by Skias of the Ionic temple near the Ilissus, and the excavations near the so-called Theseum.

Autumn Opening of the German Institute at Athens. — At the opening of the German Archaeological Institute at Athens, the speakers were W. Dörpfeld and P. Kavvadias. Dörpfeld spoke on the activity of the Institute in the previous year in Asia Minor, Ithaca, and elsewhere, and also on the Greek theatre. He showed that Vitruvius, in maintaining that the Greek Logeion was higher than the Roman, was not in the wrong if he referred to the Hellenistic theatre, as it existed in Asia Minor. The theatre of Pompey in Rome was an imitation of that of Mytilene on a larger scale. It was this theatre which Vitruvius had in view in his plan of a Greek theatre. Kavvadias discussed two inscriptions on one stone, relating to the temple of Athena Nike, on the Acropolis. The inscriptions show that the building is either of the same date as the Parthenon or slightly earlier. In one of the inscriptions Callicrates, the associate of Ictinus in the building of the Parthenon, is mentioned as architect. The method of procedure in

the employment of architects of public buildings at Athens in the fifth century was explained. (S. P. LAMBROS, in *Athen.* December 25, 1897; *Chr. BELGER, Berl. Phil. W.* January 8, 1898.)

Athens, A.D. 1395.—In *Athen. Mitth.* XXII, pp. 423-438, W. Judeich reprints from *R. Or. Lat.* III, 1895, pp. 566 ff. a part of a diary kept by Nicolaus de Marthono (Niccoló da Martoni) during a pilgrimage to the Holy Land in 1394-1395. On his return Niccoló was driven to Greece, and this portion of his diary contains an account of his visit to Attica in February, 1395. He reached Athens by land from a harbor, probably to be identified with Porto Rapti, and spent two days in the city. His account is a strange medley of accurate observation and wild legend. He mentions only objects to the south of the Acropolis, and on the hill itself; most of these are already known, but new is the story of two springs, probably the one at the Asclepieum and a cistern near by. The "stadium Aristotelis" is also unknown, but may well be one of the buildings in or near the precinct of Dionysus. A later passage of the diary mentions a return to Athens from Chalcis for a single day, and a journey to Megara by way of Eleusis.

Early Graves at Athens.—At the January meeting of the German Institute in Athens, Rubensohn and Zahn spoke of various discoveries made in excavations at the Areopagus, especially several ancient graves. The bodies in these graves were cremated. The vases found in them show the geometric system of the Dipylon vases, ninth to seventh century B.C. The vases and other objects found put the graves into the earlier Dipylon period, and show that cremation is not a later custom than burial, as has been assumed. It seems, rather, that after the Homeric time cremation and burial existed side by side. (*Berl. Phil. W.* February 26, 1898.)

Cape Colias.—In the *Ἐφ. Ἀρχ.* 1897, pp. 93-96, P. Kastriotis discusses the position of Cape Colias (Paus. I, 1, 5; Strabo, IX, 398), and finds that it was not at "Old Phalerum" (St. George), but at the cape where is the church of St. Cosmas. The temple of Aphrodite Colias stood, then, in ancient times, on the site later occupied by the church of St. Cosmas. The vases from Cape Colias were known for their excellent clay, and the only place in the neighborhood where good clay is found is the Cape of St. Cosmas.

New Notices of the Hippodrome at Olympia.—As the hippodrome at Olympia has apparently been destroyed by the inundations of the Alpheus, and as, therefore, no attempt has been made to excavate the site, any reconstruction must rest chiefly on literary sources, of which the most important is Pausanias.

The ancient authorities agree that the hippodrome was an oblong with semicircular eastern end, lying south of and parallel to the stadium, and that it had two goals around which the horses turned; but at what point the races ended, and where the judges sat are matters of conjecture.

Wernicke's suggestion (*Jb. Arch. I.* 1894, p. 203), that Pausanias's κίων (V, 15, 5) was a pillar marking the real goal, is not borne out by the context, which places "the pillar" within the starting-house. The Hellano-

dicae had their place for judging the races in the stadium on the south bank, probably toward the eastern end, and from the same position, facing round toward the south, they may have judged the horse-races as well. If, as is supposed, the western goal-post was on a line with the eastern end of the stadium, this position of the judges would be about where the finish-line is assumed to be. Pausanias only says (VI, 20, 10) that, crossing the wall of the stadium where the judges sat, one comes to the hippodrome and to the starting-house, *ἀφ' οὗ*.

As to the statements (Paus. VI, 20, 15, 21, 1) that the two long sides of the hippodrome were of unequal length and that the longer was an artificial bank of earth, by which was the so-called Taraxippus, the other a low natural ridge, at the end of which was the temple of Demeter Chamyne, it seems most probable, taking into account the position of the judges on the south wall of the stadium, and the need of a broad space where the chariots would all gather at the finish, that the north wall of the hippodrome did not continue beyond (i. e. eastward from) the southeast corner of the stadium, and that, therefore, the north wall was the shorter.

In a Greek manuscript of the eleventh century, No. 1 of the library of the Old Seraglio at Constantinople, occur several sentences about the length of the race-course and of the races in the hippodrome at Olympia. They are very corrupt, but with certain probable emendations they read: "The Olympic (games) have a racing-track measuring eight stadia, 4800 feet, one side of which is three stadia one plethrum long, while the width at the starting-house is one stadium four plethra, and by the shrine called Taraxippus. . . . The single horses of the same ages all run six stades; of the pairs, the colts of the same ages run three circuits, the full-grown horses eight; of the chariot-teams, the colts eight circuits, the full-grown horses twelve."

That the Olympic stadium and plethrum are meant need not be questioned. The measurement of the track, 4800 feet, cannot mean the external circuit of the structure, for subtracting the two sides whose lengths are given, 1900 and 1000 feet, and allowing over 1000 feet for the rounded eastern end, we have less than 900 feet for the other long side, which is too short. These eight stadia are more probably the actual course run, measured, not at the outer edge of the track, nor merely up and down the central wall, but on a line running from the end of the starting-house around the track and back to the same point, at an even distance from the enclosing bank or wall. The straight line from one end to the other would then be between three and four stadia. Whether it was the longer or the shorter of the two long sides that measured 1900 feet, is not determined. Probably the structure was made as long as the available ground allowed. The new evidence gives a considerably greater width than has been assumed, Pollack's conjecture of 800 feet coming the nearest to it.

The distances run by the various classes of competitors, if reduced to modern terms on the basis of Dörpfeld's calculation (192.27 m. to the Olympic stadium, 32.05 m. to the plethrum), make surprisingly long runs as

compared with those now customary, but are not impossible. As the evidence of the text is good, it seems that the ancients demanded more of their horses than we do. Perhaps the greater part of the course was gone over at an easy gallop, the effort for great speed being confined to the end of the race. These remarks appear to have been originally marginal notes, which finally crept into the text at the end of some metrological tables. The use of the present *τρέχονσι* implies that they were written before 394 after Christ. (H. SCHÖNE, *Jb Arch I* 1897, pp. 150-160.)

The Port of Delos.—*B.C.H.* XX, pp. 428-445, contains the report, accompanied by a detailed plan, pls. ii-iii, of E. Ardaillon on the excavations conducted from June 25, 1894, to September 1, in the same year, at Delos, in order to determine the topography of the port and the position of the ancient shore line. The question is of some importance on account of the commercial prominence of the island during the second and first centuries B.C. The harbor of Delos is on the west side of the island, sheltered on the east by Delos, on the west by the two islands Rhevmatiari, on the south by a cape of Delos, and on the north by a line of reefs which projects toward the southwest some distance across the channel, and in ancient times was strengthened into a mole to secure protection against the prevailing north wind. There seems to be no reason for believing that a similar mole existed at the south. It is clear that the harbor has been filled up since ancient times, as only very small boats can approach the shore. The ancient shore also approached much nearer the portico of Philip and the temple terrace than is now the case. The extreme length of the harbor from north to south is about 650 m. The shore line is about 800 m., of which 250 m. are occupied by quays. To the south, however, beyond the *Pte. des Pilastres*, on the bay of Fourni, the quays extend some 1500 m., but these are outside the main harbor. Two rectangular buildings can still be traced under water, — one about 40 m. from the south end of the mole, the other about 10 m. from the present shore, on a line with the portico of Philip. The ruins do not show what these buildings were. They are of the same size; and as their position is against the theory that they are light-houses or landing stages, it is probable that they mark the limits of the sacred harbor, and originally served as bases for some monument. Such a separation of the merchant harbor from a military harbor is known at other places. Here there is no military port, but a sacred harbor for the convenience of pilgrims; and at the north end can be traced a large landing-place, like a mole, from which a paved way leads toward the sanctuary. The greater part of this harbor has a gravel beach about 8 m. broad, and inside a flagging of about the same width. At the southwest of the portico of Philip, just outside the sacred harbor, is a very large paved space, in which were found many bases, and the foundations of two small buildings, — one round, the other square. At the north of the sacred harbor there are remains of quays and storehouses connected with the commercial quarter around the sacred lake and the Agora of the Hermiastae. As this part of the island was long inhabited, but little has been found, the ancient build-

ings having been demolished; but the remains show it was a merchant quarter of importance. The chief mercantile establishments were along the shore south of the portico of Philip and the public place. Here there is a long succession of docks and quays, evidently built by private enterprise, since each quay has its own storehouse and is separated by walls. Each storehouse is composed of a court opening on the sea, and of a series of rooms opening from this court. The establishments are separated by narrow lanes, running from a street which leads past the warehouses from the public place. These buildings seem to have been used for storage; but two others, near the portico of Philip, are probably the places of sale, as they are long, have open courts and large gates, no quays, and on a column drum near by was found an inscription of the *olearii*. The true centre of the commerce seems to have been the public place near the portico of Philip, close to which were three porticoes for the sale of goods, and the large warehouses, while very near was the sacred precinct, showing the close connection between religion and commerce so characteristic of this island.

Excavations of the British School at Melos.—During the work on the site of the Three Churches, in April, 1896, a number of inscribed bases were found, and considerable portions of eight statues, all of Roman period. From the public character of the inscriptions, as well as of the statues, and from traces of public buildings, it is evident that here was the agora in Roman times, and presumably also in the Greek period. The situation, adjoining the east or landward gate of the city, on the saddle of land which connects the east and west citadels, and from which the ground falls off to the north and south, is eminently suitable for the market-place; and the evidence of converging roads points to the same conclusion. This market-place, and not a military agora in the Athenian camp, is undoubtedly referred to in Thuc. V, 115, 11: *εἰλον δὲ καὶ οἱ Μήλιοι τῶν Ἀθηναίων τοῦ περιτειχίσματος τὸ κατὰ τὴν ἀγοράν*. Marbles have also been found in the olive grove north of the present field, showing that the agora extended farther than the excavations in that direction. Among these marbles is a column-drum, fluted only at the upper edge, as if it had belonged to one of those columns used in stoas and public buildings from Hellenistic times down, which were unfluted in the lower part, where most exposed to wear.

The statues and most of the inscribed blocks had been buried out of sight, either around a Christian sarcophagus or under the foundations of a building, probably a very early Christian church. The missing portions—heads, arms, etc.—were probably of separate pieces originally, and being used higher up in the walls have been destroyed. The remains of an early baptistery were also found. (D. MACKENZIE, *J.H.S.* 1897, I, pp. 122-133; 1 plan, 9 cuts.)

Artemisium.—The discrepancy of time in Herodotus's accounts of events on land and on sea before the capture of Thermopylae is easily accounted for, partly by assuming that he crowded into one day the events of the two following the great storm. With this change, his narrative is consistent with reasonable explanations, unsuspected by him, of the rela-

tions and motives of various actions — a strong proof of its general accuracy. We can infer, for instance, that both Greeks and Persians regarded the command of the sea off Thermopylae as essential to the possession of the pass, that Xerxes delayed his attack until he should have news of the fleet, and that its movements after arriving opposite Artemisium were directed by him. (G. B. GRUNDY, *J.H.S.* October, 1897, pp. 212-229.)

The Account of Salamis in Herodotus. — Professor Goodwin, in showing that the "old view" of the battle of Salamis is wrong (*Papers of the American School at Athens*, I), thinks that Herodotus has been misunderstood. It is, perhaps, better to suppose that Herodotus himself misunderstood his sources of information, mistaking an advance of the Persian right wing, which really occurred during the general engagement, for the movement to blockade the west end of the strait, and therefore putting it into the previous night. The Aeginetans probably were stationed next to the Athenians, and won their distinction by breaking the Persian centre, and falling on the left flank of the Phoenicians. (G. B. GRUNDY, *J.H.S.* October, 1897, pp. 230-240; 3 plans.)

ITALY

ARCHITECTURE

Walls attributed to the Regal Period. — In the *B. Com. Roma*, 1897, pp. 228-261, G. Pinza sets forth some sufficiently striking conclusions concerning the style and date of these walls in Rome, examining them in the light of other constructions of a similar sort in Italy and Sicily. The distribution of these constructions in Italy along the course of the Tiber and the adjacent shores of the Tyrrhene sea indicates that the motive must have been not indigenous, but imported. Nor could these walls have been built as early as the "Villanova," or protoetruscan, period, when the Romans were living in such wattled huts as the cinerary urns from their early cemeteries present to our observation. Their walls of earth and scarped hillsides were their means of defence. The *opus quadratum* construction begins to appear in the valley of the Tiber at the "period of oriental influence," which the author identifies with that marked by the appearance in tombs of protocorinthian and Corinthian vases. To the teaching of the Doric-Corinthian teachers from Sicily must be ascribed the origin of this construction in both Latium and Etruria. The Etruscans did not teach it to the Romans, nor did either people learn it from the Phoenicians, who fortified their towns in other ways. As to date, the walls of the Palatine, Capitoline, Viminal, and Caelian cannot have been built earlier than the seventh century B.C., since tombs of their period disclose vases of Corinthian and *bucchero* ware. The *agger* ascribed to Servius Tullius must be assigned to a much later date, when Rome had thoroughly united the different settlements on the hills into one city, and had contracted intimate relations with Syracuse, — that is, to a date somewhere between 474 B.C., the

date of the battle of Cumae, and the beginning of the fourth century, or the death of Dionysius I, in 367 B.C., when the star of Syracuse passed to its setting.

Early Fortifications at Perugia.—In *Röm. Mith.* XII, pp. 161–200, pls. viii, ix, F. Noack continues his architectural studies in Greek and Etruscan walls by an investigation of the pre-Roman fortifications of Perugia. The existing remains of the ancient walls are described by the aid of a new plan, and their old extent is determined. The three small gates and the walls in the immediate neighborhood are fully described; and the two great gates, the Arco di Augusto and the Porta Marzia, are examined in detail. The result of this investigation is that the ancient walls and gates of Perugia belong, in all parts, to a single plan, and therefore belong in pre-Roman times. Durn's theory of imitation of earlier walls by Roman builders is unnecessary, as it rests on the belief that the literary tradition requires a later date for the walls. A careful examination shows that this is not the case. The accounts of Velleius and Appian do not mention any destruction of the walls of the city, and there is no reason to believe that they were injured seriously by the fire which consumed the houses when the town was sacked in the "bellum Perusinum." The next question to be considered is the closer determination of the date when these walls, whose gates are among the best examples of ancient fortification, were erected. The style of building is undoubtedly influenced by the material, but is not wholly dependent on this. In Etruria the geographical division of styles is not without significance. Only on or near the southern coast are polygonal walls found,—at Orbetello, Cosa-Ansedonia, Pyrgi, and in Saturnia,—and most of these are regarded as extremely old. Farther north, in Rusellae, Vetulonia, and Populonia, the endeavor is made to employ horizontal layers; and this is the regular style of central eastern Etruria, as at Volterra, Perugia, Cortona, Chiusi, Fiesole, and Arezzo, where the layers are horizontal, though the joints in the layer are often oblique. This is illustrated by examples from Cortona, Arezzo, and Fiesole, to which group Perugia must belong. A third group is formed by the southern cities, such as Sutri, Falerii, Fescennium, Veii, and Caere, where the walls are built in rectangular blocks of two sizes. This is best shown in the Servian Wall at Rome, which, from the masons' marks, can scarcely be placed in the fourth century B.C. This style is evidently a development from that of Perugia.

These differences in style are to be explained by Greek influence. The "polygonal" style developed after the Mycenaean period, but continued after the horizontal style was well known. Of this latter style, however, there seems no certain example before the fifth century. In Etruria we find the polygonal style in those cities first touched by Greek influence, *i. e.* those of the southern coast. The usual Greek style after the fifth century is found in the central Etruscan cities; and as the best example of the still more developed style at Rome may well belong in the third century, the earlier form is to be placed in the fourth and fifth. The influence is plain at Cosa, where the union of polygonal walls with horizontal, square, and semicircular

towers is the same as that found in the fifth century in Acarnania. This leads to the conclusion that the walls of Perugia belong in the fifth, or more probably in the fourth, century. The decorations and the pointed arches also find analogies in the Greek remains.

SCULPTURE

Fragments of Early Sicilian Sculpture at Syracuse.—P. Orsi makes a contribution toward the future history of Sicilian sculpture in the description of four fragments now in the museum of Syracuse. The first is from the city, or necropolis, of Megara, and consists of a youthful male head, in a marble resembling Parian, with well-preserved hair, but much-marred features, of the Apollo, or heroic *ephebus*, type. The general characteristics of the face suggest the Apollo of Orchomenus, of Thera, or of Tenea. The treatment of the hair in three divisions,—cranial, frontal, and occipital,—kept quite distinct, is of the fashion prevalent up to the middle of the fifth century B.C., and points especially to the connection of Sicilian plastic art with Peloponnesian, particularly that of Ageladas. Chronologically, the *terminus ante quem* for this head is the year of the destruction of Megara, 482 B.C. It apparently belongs to the time not very long before this, between the thoroughly archaic period and that of the transition. It also is a new proof of the extended influence of that Apollo, or *ephebus*, type, the origin of which was ascribed to the Daedalidae of Crete.

The second fragment described, also from Megara, furnishes a similar example of the diffusion of the Ionic type of the *κόρη*. It is of local limestone (and hence surely of local manufacture), representing a young girl in an Ionic *chiton*, with the right thigh slightly advanced, as though she were stepping forward. The figure lacks the head and the most of the lower limbs, and is otherwise much marred. The sculpture was furthermore not wholly in the round, but attached to a background—a case previously unknown to Signor Orsi in archaic sculpture. In style it belongs to the class of the *κόραι* of the Acropolis, and is the first instance of that type in stone discovered in Sicily, though large terra-cottas of the same sort had previously been found in Megara-Hyblaea.

A third fragment was found in Syracuse. It is a headless female torso, of a fine compact marble, measuring from neck to abdomen only 14 cm. The figure was clothed in the long Ionic *chiton*, with short, full sleeves, and the hair arranged in long, falling locks. In the right hand the figure held a lamb, or kid, and was therefore a votive offering, perhaps referable to the ancient shrine of Artemis in Ortygia. The technique suggests that of wood or soft limestone figures. In date the sculpture can hardly be later than about 500 B.C.

A fourth fragment, also a headless female torso, of the compact, white limestone of Syracuse, suggests more strongly a kinship in technique with *ξόανα*. The dress is here the closed *chiton*, closely fitting, and with sleeves

that extend only halfway down the upper arm—a very rare fashion of dress in archaic art. Six long locks of hair in two groups, each of three diverging lines, fall over the chest, and the mass of hair at the back is arranged in a trapezoidal form, with horizontal waves ending below in trapezoidal serrations. The statue evidently belonged to the class of priestesses, or *offerenti*, common in temples and sacred precincts from the sixth century to about the time of the Persian wars, and is to be compared especially with four other archaic statues described by Homolle (*De antiquiss. Dianae simulacris Deliacis*, pl. 2, pp. 18 ff.), Loewy (*Rend. Acc. Lincei*, 1891, pp. 599 ff.), Bérard (*B.C.H.* Vol. XIV, pp. 382 ff.), and Patroni (*Rend. Acc. Lincei*, 1894, pp. 192 ff.).

All these fragments tend to establish the complete artistic dependence of eastern Sicily on the mother-country in the archaic period of art. (*Rend. Acc. Lincei*, 1897, pp. 301–312.)

Fictile Moulds.—G. E. Rizzo makes a valuable contribution to the history of Sicilian art in an article in the *Röm. Mith.* 1898, pp. 254–306, 1 plate, 24 cuts, in which he publishes a find made in July, 1894, in the neighborhood of Agrigentum, of a considerable number of fictile matrices, used to shape the figured *emblemata* with which vases were decorated, after the style of the more expensive metal ware. The art is that of the Hellenistic epoch, but is not Alexandrian.

Moulds from Tarentum.—At a meeting of the Society of Antiquaries, February 10, 1898, F. P. Elworthy read a paper upon the so-called *dischi sacri*, of which he exhibited casts of fifty-five specimens, all found at Tarentum. Little is known about these objects, but they are supposed to be Graeco-Roman of about 350 B.C. One specimen exists in the British Museum, one in the museum at Naples, and one and a fragment in the Ashmolean Museum. Up to this time the above were all that were known, so that theories concerning them have been based upon imperfect evidence. The objects are terra-cotta plaques, mostly moulds, having a large number of symbolic figures sunk in them, which are repeated over and over again in various combinations, such as the trident, lyre, thunderbolt, club, ladder, hand, and many more. It has been assumed that these disks were for the purpose of impressing the symbols upon them on sacrificial cakes, and that all known were, in fact, moulds. The entire question is as obscure as it is interesting; but the large number of these objects now discovered should lead to its solution. Mr. Elworthy also exhibited some original antefixes of the same period, of which two bore Medusae of old Greek type ornamented by Pan-like horns. He also exhibited a series of terra-cotta heads of the same period, distinctly showing the transition from the Greek style to the Roman. Other minor objects in Greek terra-cotta were produced and examined. Mr. Read remarked that from the great number of the moulds that had been found on this one site, the discoverers had apparently lit upon the centre either of the manufacture of the moulds or of another kind where the moulds were in constant requisition. Of the religious character of the objects there could be little doubt, having regard to the symbols of the

various deities which formed the designs upon them, and he would suggest that the moulds were used for producing cakes either of some edible material or perhaps of terra-cotta; and in the one case they may have been eaten with the hope of good resulting therefrom, or the cakes may have been used as votive offerings at the pantheistic shrine appropriate to the design of the cake. An analogous instance was to be found in the stamped idols of bricks, with animals and images of Buddha, which are found in quantities at Buddha Gaya. (*Athen.* February 19, 1898.)

PAINTING AND VASES

The Bomarzo Vase with the Etruscan Alphabet.—The vase is pictured, and submitted to a critical examination by F. Barnabei with regard to its technique. The result reached agrees with the opinion advanced by Gamurrini, from purely palaeographical considerations, that the Bomarzo vase, and consequently the alphabet thereon figured, is not older than the third or second century B.C. The same date must be ascribed, for similar reasons, to the two *patrae* with the Etruscan alphabet found at Nola. (*Not. Scavi*, 1897, pp. 508-510; cut.)

Ceramics of Prehellenic Apulia.—In the *Röm. Mitth.*, 1897, pp. 201-252, 1 plate, 25 cuts, M. Mayer publishes the first of a series of careful studies on this subject, beginning here with a series of vases that he classes as Messapic. The most interesting group of these, which he discusses at length, consists of peculiar amphorae, called by him, in accordance with a local designation, *torzelle*. The handles are high and angular, as if jointed, at the topmost part, where, as at the point of attachment to the body of the vase, they are ornamented with wheel-shaped discs. The patterns are prevaillingly geometrical or foliage designs, and the coloring in the later specimens is in monochrome, red or brown, while the earlier style is in the two colors together, violet, however, not appearing at all. Other shapes of Messapic pottery show the same general characteristics.

The House of Vettius at Pompeii.—*Archaeologia*, LV, 1897, pp. 301-318, contains a paper read at a meeting of the Society of Antiquaries, February 20, 1896, by Talfourd Ely, in which the house of Vettius is described. The paper is illustrated with a plan and four photographic reproductions of paintings. A list of the paintings in the house is given, and some of them are discussed, with references to other representations of the same or similar scenes.

INSCRIPTIONS

The Fratres Arvales.—Under the title 'Nuove Osservazioni sopra gli Atti dei Fratelli Arvali,' D. Vaglieri has suggested various new arrangements of certain fragments, and has proposed new amplifications of portions of the remains of the *Acta* of the *Fratres Arvales*. The portions specially considered are *C.I.L.* VI, 2029, 2059, 2065, 2078, 2080, 2086, 2107. (*Not. Scavi*, July, 1897, p. 309.)

Some Roman Titles. — Attention has recently been called to the sepulchral inscription of a certain T. Aelius Felix who was *atiutor (sic) ab annona* probably the same as *adiutor praefecti annonae* (*C.I.L.* VI, 8470); also to the sepulchral inscription of Silvanus entitled *dispensator scaenicarum* (cf. *procurator scaenicarum*, *C.I.L.* VI, 10088) whose wife's name is Quintilia Procula and whose daughter's is Cornelia Procilla.

Another inscription is set up by the *officiales ab ara circi* to a man who is strangely entitled *birotis*. (*Not. Scavi*, 1897, pp. 452-458.)

A Charm of Execration. — R. Wuensch describes, with the aid of a facsimile and a transliteration, a thin plate of lead, 17 by 12 cm. in measurement, now preserved in the Magazzino of the Caelian and containing a formula of execration in Greek. The plate was found in 1876 in the expropriated land of the Villa Aldobrandini on the Quirinal tightly rolled up, and deposited in an amphora containing the ashes of an incinerated body. The essential part of the inscription is an invocation addressed to the "holy angels and holy names," begging them, with great superfluity and detail of circumstance, to incapacitate a certain charioteer of the Roman circus, Eucherus by name, so as to prevent him from winning certain races to be held on the morrow. A large part of the plate is filled with rude sketches of objects with asses' heads, sometimes combined with serpents, and with the manifold repetition of some magical words of unrecognizable import, and of others which may be recognized as anagrams of the name *Εὐλάμων* or *Εὐλάμωσ*, found on other tablets as *Εὐλάμων*, an epithet of Osiris, the judge of the dead. These, and the sketches, point to the formula as originating with a member of a Gnostic sect of the Sethiani, who worshipped, besides this Eulamon-Osiris, the god Typhon-Seth, who was represented under a human body with the head of an ass. Paleographical considerations lead to the assignment of the plate to the neighborhood of the year 300 A.D. (*B. Com. Roma*, 1897, pp. 103-109.)

The Epigraphic Notes of Ferdinando Ughelli. — R. Lanciani in the *B. Com. Roma*, 1897, pp. 143-151, calls attention to the curious forgetfulness of the editors of the *C.I.L.*, who though mentioning in one place the present whereabouts of these notes of Ughelli (in the *Cod. Marinianus Vaticanus*, 9141, fol. 176-210) in other places speak regretfully of their loss or concealment. Lanciani remarks that the notes are of no very striking importance, but yet often have a value for the indications they furnish of the date and condition of various discoveries of which he was an eyewitness, — especially of the burial place between the Laurentine and Ostian roads on the hill of the *vicus Alexandri* near the new fort, — and of topographical points elsewhere. Some of the more important inscriptions are printed in the article.

Stamps of Cn. Ateius. — In an article entitled 'Die Terra-Sigillata-Gefässe des Cn. Ateius,' A. Oxé has shown that the *cognomina*, *Eu(h)oidus*, *Ma(h)es*, *Xant(ous)*, *Zoilus*, were used alone as stamps of the business firm of Ateius. All the pottery manufactured by this firm of *figuli*, and found along the Rhine, is declared to belong to the time of Augustus. A large

number of the inscriptions of the stamps of Cn. Ateius, given in the *C.I.L.*, are corrected and amplified. (*Jb. V. Alt. Rh.* Vol. 101, 1897, p. 22.)

The Gallic Word "Bratoude."—M. Bréal (*R. Arch.* XXXI, July-August, 1897, pp. 104-108) explains the word "Bratoude," occurring in Gallic votive inscriptions, as the equivalent of the Latin "Merito." A votive inscription in Naples (Zvetaieff, *Inscriptiones Italiae Mediae*, No. 9) ends with the words *brat data*, and two others (*ibid.* No. 33; Zvetaieff, *Sylloge*, No. 143), the originals of which are lost, have *βρατομ* and *βρατωμ*. These determine the meaning of *Bratoude*.

COINS

Chronology of Coins of Nero.—Ettore Gabrici writes in *R. Ital. Num.* Vol. X, fasc. 3, on the chronology of the coins of Nero. The classification of the stupendous series of Nero's coins has not been specially treated since Kenner's article in *Num. Zeitschr.* of 1878, and never so carefully and exhaustively as in the present paper. The author has based his method on that of Kenner; but his deductions are drawn from a personal study of more than a thousand types existing in the collections of Italy. Few of Nero's coins bear dates, but these show a continuous series of all the years of his reign. Down to 63, they appear only on the gold and silver; after that year only on the bronze coins. They show a development in the style of his portraiture which is of use in determining the chronology of the undated coins; and this general development is classified in three divisions, according to the proportions, the depth of relief, the presence or absence of beard, the arrangement of the hair, and certain determinative symbols. Examination shows that no change in mintage occurred from Augustus to Nero, but that the latter in 63 instituted a general reform of type and quality. The coins distinguished with a small globe belong to the years 56-63, and show the highest artistic development. The lack of an accurate means of determining the denominations, whether *as* or *dupondius*, etc., led first to the placing of a sign of value, and later to a difference in the type itself, the radiate crown, for instance, being distinctive of the *dupondius*. These variations of type are conveniently classified in a table. In 63 the weight of the gold and silver coins was reduced, the arrangement of their accessories was changed, and the *as* was struck in *aurichalcum* instead of copper.

Basing his studies on the observation of these and similar variations, the author is led to new conclusions regarding the date of the first appearance of main types. According to him, the *adlocutio* type began in 54, the *decursio* not before 56 or 57, the *victoria* and *citharoedus* about the same time, the *annona* in 58, the *securitas* and *genio* in 59, the *congiarium* in 60 or soon after, and the arch type in 61 or 62. All these types, of course, were repeated in the following years. The shrine of Janus was closed only once under Nero, apparently in 56 or 57. The article is enriched with five excellent plates, illustrating the portraits of Nero as seen on his coins.

Types of Coins of Brutus.—In *R. Num.* 1897, No. 4, J. Martha writes of some types of the coins of Brutus. The types relating to the cult of Apollo on the coins of Brutus (head of Apollo, lyre, tripod, etc.) refer to the incident of the oracle at Delphi in the story of the first Brutus and the sons of Tarquin (Livy I, 56; Cic. *Brut.* 53), and fall in line with the habit of the Roman coiners of placing on their coins types indicative of their family traditions. Martha recalls also that "*Apollo*" was the password given to the republican forces on the day of the battle of Philippi. (Plut. *Brutus*, 24.)

Names of the Empress Maesa.—In *R. Num.* 1897, No. 4, R. Mowat discusses the names of the Empress Maesa. He cites three Greek coins of Ilium to prove that the full name of the empress was Julia Mamaea Maesa. Two of these coins—in his own and in the Waddington collection—have MAMIA MAICA with her portrait. The evidence, though circumstantial, is rather convincing; for in the sequence of names at that period the daughter of Julius Aritus and Julia Mamaea Maesa might naturally be called Julia Arita Mamaea, as we know she was called.

Ancient Tesserae and Seals.—In *R. Num.* 1897, No. 4, Rostovtsew has an article entitled 'Étude sur les plombs antiques.' The paper is a classification and consideration of the tesserae and seals used in commerce.

MISCELLANEOUS

The Extent of the City of Rome under Vespasian.—In *Röm. Mitth.*, 1897, pp. 148–160 (1 plan), Ch. Hülsen adds another to the numerous articles that have been written in elucidation of the statistics concerning the city of Rome given by Pliny (*N. H.* III, 66, 67). His main conclusions are: (1) the outer boundary of the city of the fourteen Augustan regions did not coincide with the area included within the walls of Aurelian on the left bank of the Tiber, overrunning that area on the Pincian, falling within it on the Quirinal, Viminal, and Esquiline, and overrunning it again by the *amphitheatrum castrense*, and outside the *porta Appia*; but the total extent of this Augustan boundary corresponds fairly well with the figures given by Pliny; (2) the thirty-seven *portae* are the barriers for the octroi-collections, and are all situated in the Augustan boundary; they may have been connected by some sort of a wall; the *veteres portae quae esse desiderunt* are exits of this sort arranged by Augustus, but later given up as unnecessary; the Plinian phrase *ita ut duodecim semel numerentur* is hopelessly corrupt, though one would expect him to have written something like "reckoning in twelve which did not belong to the original plan"; the sum of the distances as given by Pliny from the *milliarum aureum* to the thirty-seven gates is also corrupt past mending, though 40,765 would come nearer the true figure than either 20,765, or 30,765, as various manuscripts read; the object of these radial measurements was to aid in computing the area of the city by dividing it into a series of triangles with sides known; (3) the sum of the distances given by Pliny as measured along the main streets to the

end of the inhabited region, including the *castra praetoria*, is also hopelessly corrupt.

Excavations on the Via Graziosa at Rome in 1684.—R. Lanciani, in the *B. Com. Roma*, 1897, pp. 159-163 (cut), makes some more detailed remarks concerning the early and later history of these discoveries which he had previously described in his *Ruins and Excavations of Ancient Rome*, pp. 393, 394. The cut is the same as that given in the book.

Ancient Roman Streets Discovered in the Seventeenth Century.—R. Lanciani reprints and discusses in the *B. Com. Roma*, 1897, pp. 151-159 (plate), a manuscript of two pages only with accompanying plan (*cod. Barberinus XXX, 2*) that he declares to be more important for topographical studies than many volumes together. It bears the title *Vestigia Antiqua Viarum Publicarum Urbis*, and is proved to be the work of Claude Ménétrier, called Borgognone, a Frenchman by birth, who became librarian of Cardinal Barberini (later Urban VIII), and died in Rome, in 1639. The text describes briefly the position of about ten stretches of ancient streets within the city walls, discovered by excavations in Borgognone's time, while these and a number of others, thirty-two in all, are laid down in red pencil upon an accompanying plan of the city engraved in perspective (the second edition, by Pietro de' Nobili, of Du Perac's plan, dated 1573). Lanciani reproduces them more clearly upon an outline map of the city, and gives a descriptive list.

Egyptian Obelisks in Rome.—In the *B. Com. Roma*, 1897, pp. 196-227, O. Marucchi completes his series of articles on this subject by treating of the obelisks manufactured to order in Rome (so the author holds) for certain Roman emperors and set up there. Of the obelisks discussed, there are two groups of three each, those with inscriptions and those without. The obelisks with inscriptions are, first, that of the piazza Navona, in honor of Domitian, probably placed at first by the temple of Isis in the Campus Martius, and in the fourth century transferred to the *spina* of the circus of Maxentius on the Appian way, whence it was brought to Bernini's fountain in the piazza Navona under Innocent X in 1651; second, the obelisk of the Pincian, originally erected by Hadrian by the tomb of Autinous on the via Labicana (cf. Huelsen and Erman in *Röm. Myth.* 1896) in honor of his favorite, and thence transferred by Urban VIII to the palazzo Barberini, where it lay till Donna Cornelia Barberini gave it to Clement XIV. This pontiff transferred it to the giardino della Pigna of the Vatican, and left it lying there till 1822, when Pius VII finally set it up on the Pincian; third, the obelisk of Trinità dei Monti, the inscription on which differs from those of the other obelisks of imperial order in containing no reference to any Roman emperor, but being an imitation of the inscription in honor of Seti I and his son Rameses II on the obelisk set up by Augustus in the Circus Maximus and now standing in the piazza del Popolo. The obelisk of Trinità is the one mentioned by Ammianus Marcellinus (XVII, 4) as erected in the gardens of Sallust (probably between the reigns of Commodus and of Gallienus), whence it was carried by Clement XII, in 1733, to

the Lateran basilica, with the intention, afterward abandoned, of raising it there. Pius VI finally had it erected in its present position in 1789.

The obelisks without inscriptions are, first, the two now standing, one before S. Maria Maggiore, the other between the Dioscuri on the Quirinal. They were both found in the sixteenth century among the ruins of the Mausoleum of Augustus, behind the church of S. Rocco, and are doubtless the two referred to by Ammianus as erected in *Augusti monumento* (l. c.). Sixtus V had one of them erected in 1587 in front of S. Maria Maggiore, while the other remained in the place of its discovery till 1782, when Pius VI directed its erection on the Quirinal. The third obelisk is that of the Vatican, erected by Caligula on the *spina* of the circus of Caligula and Nero, and transferred to its present position under Sixtus V in 1586. Pliny (*N. H.* XXXVI, 74) refers to it as the first of the imitative obelisks, — *ex omnibus unus omnino factus est imitatione eius quem fecerat Sesostridis filius Nuncoreus*.

The Site of Lake Regillus. — Mr. Thomas Ashby in a communication to the Accademia dei Lincei (published in the *Rend. Acc. Lincei*, 1898, pp. 103-126; 1 map, 2 cuts), after pointing out various reasons for believing the battle of Lake Regillus to be an historical event, goes on to discuss at length the question of its site. He treats of each of the following seven localities, — (1) Laghetto della Colonna, (2) Lago di Castiglione (Gabbii), (3) Lago della Cava d' Aglio, (4) Lago della Doganella, (5) Bacino di prata Porci, (6) Bacino di Pantano Borghese, (7) Bacino di Pantano Secco, — all of which have had their supporters, and finally concludes that it is not possible to affirm with certainty that any one of these sites agrees precisely with the description of the battle-ground in *agro Tusculano* (*Liv.* II, 19) with the exception of Pantano Secco and of Prata Porci. Of these two, it is doubtful that the second was a lake in ancient times. The first, therefore, Pantano Secco, must be taken as the true site of the battle. It is an anciently drained crater, lying about three kilometres directly north of Frascati, a short distance beyond the railway from Rome to Naples.

Museum Notes. — In *Röm. Mith.* XII, pp. 112-143, E. Petersen publishes a number of notes on objects in the museums of Magna Graecia and Sicily.

(1) Terra-cotta plaque at Bari, representing in relief a tripod, and also a vase of strange form, evidently an *ex voto* of a poor man, who could not dedicate the metal vases themselves.

(2) A bowl and upper part of a tripod from Capua, in Brindisi, very similar to the one from Metapontum (*Röm. Mith.* XII, fig. 6.)

(3) A bronze rod in the Museo Biscari, at Catania, to which small bronze figures are soldered. It resembles the ornamentation found on tripods, but its exact use cannot be determined.

(4) The bronze Siren in the Museo Civico, at Catania, already mentioned by Furtwängler (*Meisterwerke*, 254¹), is published from a photograph, and accompanied by a full description.

(5) The decoration of the plate between the handle and the disc in

ancient mirrors (Furtwängler, *Hist. u. philol. Aufs. f. E. Curtius*, p. 179), is discussed, and the development shown by four examples in Reggio and Catania.

(6) A breastplate in the Museo Jatta at Ruvo, formed by three discs, arranged in a triangle, with the point downward. It is like a piece of armor represented on vases of the third century.

(7) An archaic head in the Museo Biscari, at Catania (pl. vi). It is of coarse, Greek marble, though probably found in Sicily, and is fairly well preserved. It belonged to a life-size statue of a youth, and is not exactly like any known head. It suggests rather the older Heracles and Perseus of the Selinus sculptures than the later works.

(8) Torso of a youth in the Museo Biscari, which seems related to the pediment sculptures from the temple of Zeus at Olympia. Its exact pose cannot now be determined.

(9) A badly mutilated head, larger than life, at Tarentum. It can scarcely be much later than 500 B.C., and may possibly be regarded as a predecessor of the Cassel Apollo, or the bronze head of the Tyskiewicz collection.

(10) A marble head of Athena, at Tarentum, in the grand style, but badly damaged from lying long in the water.

(11) Four caryatids and two bits of sculptured frieze, now preserved at Lecce and Spangano. The caryatids are about 1.77 m. high, and are in very high relief. In spite of many defects, they show plainly the influence of Greek art of the fourth century, especially in the folds of the *apoptygma*, which recall the Amazon of Polyclitus. The fragments of the frieze are alike, and show a naked Eros drawn in a chariot by three lions. This also can belong to the fourth century, though similar representations are rare in works of that period.

(12) A much restored replica of the Tyche of Antioch, with an ancient but not original head, in the Museo Biscari at Catania.

(13) A head of "Sappho," in the same museum, showing greater resemblance to the Chigi than to the Albani head.

(14) A small and poor replica of the Vatican Nile, with a very badly restored head.

(15) The hand of a pugilist, in Reggio, showing the cestus in a much less dangerous form than usual.

(16) A terra-cotta female head (pl. vii), not in Kekulé, nor exactly like any of the types there shown. It seems later than the head described under No. 7. The places of discovery and of preservation are not mentioned.

(17) A remarkable terra-cotta relief in Tarentum, representing a youth borne by a centaur, who holds on his left arm a large crater, and in his right hand a lyre. The attitude of the youth is that of the feasting man, so common on the Tarentine terra-cottas, but here he is being carried to the feast by his servant centaur. As Wolters has shown that in such scenes the youth can only be regarded as heroized, we see here that the good centaur

has become almost a Charon in his office. The work belongs to the fifth century.

(18) The terra-cotta of the Museo S. Angelo in Naples, already discussed by Reisch (*Griech. Theater*, p. 232), is published from a photograph. It is not properly a relief, but rather a work in the round, and represents not a city gate, but the *scena* of a Greek theatre. A projecting base runs across the entire front, and marks on this show that originally various objects were fastened to it, so that it seems probable that the whole was the representation of a scene from a play. Many of the terra-cotta figures of actors may well have belonged originally to such scenes.

The Secondary Cemeteries of Syracuse.—These are carefully studied by Professor P. Orsi, who points out that they are valuable, in spite of their poverty, as furnishing contributions to our knowledge of the topography of the ancient city. Especially his recent investigations in the necropolis at Scala Greca, attributed by him to the quarter of Tyche, have proved that this area was set apart for burials after Dionysius (about 402 B.C.) had built the northern wall, including within the city the terrace of Epipolae, which had been the necropolis of Tyche. (*Not. Scavi*, 1897, pp. 471–504.)

The Siculi.—In the *Revue des deux Mondes*, 1897, pp. 594–632, under title 'Un peuple oublié, les Sikels,' G. Perrot treats of the Siculi from the neolithic period (2000–1300 B.C.) represented by the cemeteries of Melilli and Castelluccio, through the bronze period (1300–1000 B.C.), represented by the cemeteries of Plemmyrium, Thapsus, Molinello d'Augusta, and Pozzo del Cantano, to the period extending from 1000–700 B.C., corresponding in part to the Dipylon period in Greek art, and represented by the cemeteries of Tremenzano and Finocchito. (*Riv. Stor. Ital.* 1897, pp. 336–338.)

FRANCE

A Representation of the Roman Vesta.—No representation of the Roman Vesta has been known, the figures to which the name of Vesta has been given being either Greek work or Roman imitations of the Greek type of Hestia. It has even been believed, on the strength of Ovid, *Fast.* VI, 295, that no statues of Vesta existed. The passage refers, however, only to the fact that there was no statue of Vesta in the round temple in Rome. Several statements of ancient writers show that statues of Vesta did exist, and Ovid, *Fast.* III, 45 ff., says that when Rhea Silvia became a mother, the statues of Vesta covered their faces with their hands. This is equivalent to a statement that Ovid knew statues of Vesta with their faces thus covered. An altar at Mavilly (Côte d'Or), published *R. Arch.* 1891, has reliefs representing the twelve *dii consentes*. Vesta must be among these, and is now recognized in a draped female figure holding her hands before her eyes. (S. REINACH, *R. Arch.* XXXI, 1897, pp. 313–326; cut.)

SPAIN

Terra-cotta with Head-dress of Julia Titi.—A. Papier publishes (*R. Arch.* XXXI, 1897, pp. 336-340; cut) a terra-cotta head of little artistic merit, found in 1893 in Spain, but probably from Alexandria, which resembles the portraits of Julia, daughter of Titus. This head is, however, probably not a portrait of Julia, but represents one of the little ladies whose exaggerated *coiffures* are mentioned by Juvenal, VI, 491. Probably other works, representing the same way of dressing the hair, are to be regarded as portraits of Julia only when the features show a resemblance to those of Titus.

GERMANY

The Hildesheim Treasure of the Antiquarium in Berlin.—Through a recent restoration, which has carefully united the fragments of broken vessels, supplied missing parts, and reattached feet and handles, the Hildesheim silver treasure has, in spite of many gaps, regained something of its original appearance. Compared with the Boscoreale treasure, which was evidently a table service in use in Nero's time, and, to judge from Pompeian examples, largely work of that epoch, the German collection has a much wider range, both in time and in style, and is, in general, of finer workmanship. The worn condition of the vessels, the numerous ancient repairs or replacements, and the occurrence of so many single vessels, instead of the customary pairs, indicate that it was in use a long time. While it contains many pieces which would have been antiques to the owner of the Boscoreale collection, yet one piece bears an inscription [*M. Aurelius C*(...)] apparently of the second century after Christ.

Among the important pieces now reconstructed for the first time or more correctly than before, are the following:

A platter with fluted bottom, like one of pottery at Bucharest, and flat rim serving for handles. It shows signs of kitchen use.

A pair of cups, perfectly plain except for a wreath of gilded leaves laid about the edge.

A small tripod of delicate workmanship, bearing on one leg an inscription (*M. Scatonis duo pondo duo semis semiunciam*) which shows that it was one of a pair, probably to support a pair of choice cups, and gives approximately, by subtraction, the weight of the missing base to which the feet were once attached. The name Scato occurs only in Cicero and in three inscriptions of Praeneste, of the republican period.

The large bell-shaped crater, with free scroll decoration running over the surface. This piece is found to be not hammered, but cast, with the relief finished carefully by hand.

Two large bumpers, noticeably different in style from the rest of the set, and now conjectured to be of provincial manufacture.

Four small vessels formerly classed as bowls, now shown by the discovery

of the handles of one of them to be drinking cups. The shape, a high, almost cylindrical, rim or body, with slightly curved bottom and high foot, is a late development from that of the so-called cylixes of minor artists of the sixth century, themselves imitated from metal vessels. With their simple decoration of an ivy wreath in enamel about the rim, they have the air of being, if not Greek, then copies of genuine Greek work.

Of the "emblem" ware, many pieces are apparently of the middle of the first century after Christ; but one, with the bust of the infant Hercules, is dated as earlier by its close resemblance to the statue of Augustus at Prima-porta. Among these pieces is the finest of the whole collection, the Athena cup. The relief here is not a bust, but an entire figure of the goddess, seated on a rock, while on another rock before her is the wreath of victory and the owl. The scene is thoroughly in Hellenistic taste, and the details of the drapery and figure, even to the strange object on which her right hand rests, find their closest analogies in Pergamene sculpture and coins of the second century B.C. This resemblance, together with the character of the delicate palmetto border about the relief, and the care with which the foot and the original handles were made by the same artist as the cup itself, justifies the assumption that this is really a Greek work of Hellenistic origin.

Two round cups, of the shape known in pottery as Megarian, have suffered, like the Athena cup, from the addition of inappropriate handles. A comparison with two silver cups in Naples, of similar shape but greatly superior design, shows how the decoration which covers their surface had degenerated from the vigorous acanthus-leaf patterns of an earlier type. Another development of the acanthus pattern is found on the lower part of the two mask-canthari, where entirely unconventional forms of birds, etc., among the conventionalized foliage, give almost the effect of a Hellenistic landscape-relief. These goblets are not earlier than Augustus, and may be as late as Nero, while the "Megarian" cups are probably of the first century B.C. They are interesting as links in the long chain of ornament derived from the acanthus. (F. WINTER, *Arch. Anz.* 1897, III, pp. 115-131; 18 cuts.)

A Votive Inscription at Nettersheim.—The following votive inscription on red sandstone discovered in 1891, but only recently deciphered, has been completed by J. Klein.

In h · DD
sanctis SIMIS MA
tribus PRISCINV
..... LEG · I · M
p · p · pro · SE · SVIS
que posvit · EX
voto per PETVO · ET
Corneli ANO

(*Jb. V. Alt. Rh.* Vol. 101, 1897, p. 182.)

Potter's Stamps at Neuss. — A. Oxé and M. Siebourg, under the title 'Die Töpferstempel der Sels'schen Sammlung,' have set forth an alphabetically arranged table of the stamps of the pottery in the so-called Sels collection found in the neighborhood of Neuss. A large number of stamps are given. (*Jb. V. Alt. Rh.* Vol. 101, 1897, pp. 12-21.)

A Dedicatory Inscription at Niederberg. — An inscription on a pedestal which stood in the *castellum* at Niederberg was discovered in 1888, but has, until recently, defied explanation. About half of the pedestal remains, and on it the left foot of a standing figure. The measurements of the inscription are 73 mm. long, 215 mm. broad, 240 mm. high. The letters are 16 mm. high in the first line, but 15 mm. in the second and third lines. The inscription refers to the *coh. VII Raetorum equitata Antoniniana* which is known to have been located in the *castellum* of Niederberg, as shown by other inscriptions, *e. g.*, on tiles. The inscription, as restored by Dahm, is as follows:

genio LOCI COH · VII
raetor · eqVIT · ANTON
v · s · l · l · MERITO

The pedestal is part of an altar which was set up under Caracalla or Elagabalus, and dates between 211-222 A.D. (*Jb. V. Alt. Rh.* vol. 101, 1897, p. 183.)

The Zellhausen Inscription. — Professor v. Domaszewski discusses the well-known Zellhausen inscription (Brambach 1408) and restores it as follows:

I(ori) [o(ptimo)] m(aximo) Helio[p]olitano V[e]neri felici Mercurio [A]ug(usto) M(arcus) Iulius Marci fil(ius) Fa[b]ia Rufus Papinianus Sentius Gemellus do[m]o Beryt(o) praef(ectus) coh(ortis) . . . A[q]uit(anorum) castris E. . id. Em[ili]an[o] II et Aqu[ili]n[o] cos]. a. 249. v(otum) s(uscipitum) s(olvit) l(ibens) m(eritis).

(*Kb. Wd. Z. Ges. K.* 1897, coll. 172-176.)

Roman Military Inscription at Waldürn. — During the excavating of August, 1897, in the ruins of the bath house of the *limes-fort* at Waldürn (the "Alteburg") there came to light on an altar-shaped monument of sandstone 1.19 m. high, the following inscription of the year 232 A.D.

DEÆ FORTVN/// | SANCTÆ · BA·NE/// | VEVSTAÆ · CNLA/// |
SVM · EXPL · STV'//// | Ꝥ · BRIT · GENILES | OFFICIAES ·
BRIE | DEDTIC · ALEXANDRIANORVM · DE | SVO · RESTTVER ·
CV | RA · AGENE · T · FL · ROMANO · Ꝥ · J · G · XXII P P F | ʒ ·
AVG · LVPO · EMAXIM | COS

The interpunction is triangular. Th. Mommsen appends a learned note to the account of the discovery, pointing out the unique character of the

inscription in that the *dediticii* appear here first in a military inscription, though they are known from literary sources as barbarians living within Roman territory, but without even local affiliations in any legal way, — while the *gentiles* lack the distinctly Roman “personal-recht.” The injury at the end of the fourth line of the inscription is especially unfortunate, as under the letters **STV'III** is concealed perhaps the local name of Waldürn, by which the *expl(oratores)* were designated. (*Limesbl.* 1897, coll. 658-667.)

BULGARIA

Monument at Adamklissi. — In the *Sitzungsber. Mün. Acad.* 1897, pp. 247-288 (7 figs.), A. Furtwängler returns to the monument at Adamklissi, and replies to the objections of Benndorf (*Arch.-Ep. Mitth.* XIX, Heft 2), Petersen (*Röm. Mitth.* 1896, pp. 302 ff.), and Cichorius (*Philolog.-histor. Beiträge Curt Wachsmuth zum sechzigsten Geburtstage überreicht*) to his theory that the monument was erected after the campaign of Crassus, 29-28 B.C., the inscription of Trajan being a later addition (*Intermezzi*, pp. 51 ff.). A new reconstruction by Professor Bühlmann is published. In this the upper part of the monument is made higher than in previous reconstructions, and the inscription of Trajan is put upon one great slab on the south side of the monument, the northern side being already occupied by the sculptured group. The new inscription was framed to match the architecture of the monument. The costumes and armor represented in the sculptures of this monument do not agree with those of the column of Trajan at Rome, nor is there any likeness between the men represented here and Dacians. The Bastarni, whom Crassus overcame, were Germanic, and the sculptures of Adamklissi show a Germanic type. The face which has been regarded as a likeness of Trajan bears no more resemblance to him than to any other beardless soldier. The poor work of the sculptures of Adamklissi is no sign of late date, and does not support the view of Cichorius that the monument belongs to the time of Constantine.

A Military Diploma. — In September last R. Cagnat presented to the Académie des Inscriptions et Belles-Lettres a brief account of a newly discovered *diploma militarium* found at Negovanovtzi, a village of Bulgaria. This is the seventh diploma which has been discovered in Bulgaria. The exterior surfaces are in good condition; but oxidation has effaced a number of words of the interior surfaces. The length of the plates is 0.147 m., the breadth 0.171 m.

The text is as follows:

Im(perator) Caesar, divi Vespasiani f(ilius), Domitianus Augustus Germanicus pontifex maximus, tribunus(cia) potestat(e) xiii, imp(erator) xxii, co(n)u(l) xvi, censor perpetuus, p(ater) p(atris) equitibus et peditibus qui militant in aliis tribus et cohortibus novem quae appellantur;

*II Pannoniorum
et Claudia Nova
et Praetoria* } (Alae)

<i>et I Cilicum</i>	} (Cohorts)
<i>et Cisipadensium</i>	
<i>et I Cretum</i>	
<i>et I Flavia Hispanorum milliaria</i>	
<i>et I Antiochensium</i>	
<i>et II Gallorum Macedonica</i>	
<i>et IIII Raetorum</i>	
<i>et V Gallorum</i>	
<i>et V Hispanorum</i>	

et sunt in Moesia Superiore sub Cn. Aemilio Cicatricula Pompeio Longino qui quina et vicena stipendia aut plura meruerunt, item dimissis honesta missione, emeritis stipendiis, quorum nomina subscripta sunt ipsis liberis posterisque eorum civitatem dedit et conubium cum uzoribus quas tunc habuissent cum est civitas iis data aut si qui caelibes essent cum iis quas postea duxissent dumtaxat singuli singulae;

A(nte) d(iem) xvi K(alendas) Domit(ianas), T. Pomponio Basso L. Silio Deciano co(n)s(ulibus).

Cohort(is) I Cisipadensium, cui prae(e)st L. Cilnius, L. f., Pom(ptina tribu), Secundus;

Pediti: L. Cassio, Cassi f(ilio), Larisen(si).

Descriptum et recognitum ex tabula aenea quae fixa est Romae in muro post templum divi Augusti ad Minervam.

WITNESSES

<i>Q. Orfi(i)</i>	<i>Cupiti</i>
<i>C. Iuli(i)</i>	<i>Saturnini</i>
<i>Q. Aemili(i)</i>	<i>Soterichi</i>
<i>L. Pulli(i)</i>	<i>Sperati</i>
<i>Cn. Egnati(i)</i>	<i>Vitalis</i>
<i>L. Pulli(i)</i>	<i>Heracles</i>
<i>P. Cauli(i)</i>	<i>Vitalis</i>

This diploma provides us with information of the existence of a *Cohors Cisipadensium*. This will supply the letter lacking in *C.I.L.* V, 8185, in the mutilated word *-isipadensium*.

Again we learn that *Cn. Aemilius Cicatricula Pompeius Longinus* at the time of the date of this diploma, September 16, A.D. 93, was governor of Moesia. See *C.I.L.* III, pp. 857, 862.

This document also supports from the side of epigraphy the statement of Suetonius (*Domit.* 13) that Domitian changed the names of the months of September and October to *Germanicus* and *Domitianus*.

T. Pomponius Bassus is here shown to have been *Consul Suffectus* of the Emperor Domitian, at the time of his sixteenth consulate. See *C.I.L.* VI, 1492, also Pliny, *Epist.* IV, 13. (*C. R. Acad. Insc.* XXV, 1897, p. 501.)

A Military Diploma.—A *diploma militarium* has been discovered at Choumla in Bulgaria, which is of interest as being the seventh document of

this kind referring to the fleet at Misenum. (See *C.I.L.* III, *Constitutiones Imperatorum*, Nos. I, IX, XLV, XLIX, LVI, XCI.) This diploma is a mere fragment, giving the upper part of the first plate, the dimensions of which are 0.065 m. and 0.068 m.

OUTER FACE

imp·caesar divi nervae f·nervæ traianus
aug·germanic·pont TIFEX Maximus tribu
 nicPOTESTAT III COS ii
*iis*QVIMILITAVERVNT *in classe praetoria*
 MISENENSIQVAEESTSub.....
 .ONESEXETVIGINTISTIPENDIS emeritis
 DIMISSIS HONESTA MISSIONE quorum
 NOMINA SUBSCRIPTA sunt *ipsis li*
 BERISPOSTERISQVE EORUM civitatem
 DEDIT ET CONVIVM cum uxoribus
quas tunc habuissent..... etc.

INNER FACE

imp·caesar divi nervae f·nervæ traianus
*aug·ger·*PONT MAX TRIB pot·ii cos·ii
iis qVIMILITAVERVNT *in classe praet*
oria MISENENSI QVAE est sub.....
 ..ONE SEX ET VIGINTI stipendis emeritis
 DIMISSIS HONESTA missione quorum
 NOMINA SVBSCRIPTA sunt.... etc.

The supplementing of this fragmentary inscription has been made by M. Héron de Villefosse on the theory that the date is 99 A.D. (*C.R. Acad. Insc.* XXV, 1897, p. 539.)

AFRICA

Mosaics at Susa (Tunis).—In the *R. Arch.* XXXI, 1897, pp. 8–22 (pls. ix–xii; cut), P. Gauckler publishes some mosaics found at Susa in the spring of 1896 during excavations for the foundations of the new arsenal. This is near the house of Sorothus, incompletely excavated in 1886–1887. First a mosaic, representing probably the last interview between Aeneas and Dido, came to light. Soon after an interesting series of mosaics was found, which once adorned the *oecus* of a Roman house with its two wings, antechamber, apse adjoining the antechamber, and peristyle. The pavement of the peristyle has an elaborate pattern of curved lines, interlacing

and leaving circles to be decorated with rosettes or palmettes. In the bands of curving lines are alternately blades of wheat and garlands. The colors are red, brown, green, yellow, and black, but the white ground predominates. The floor of the antechamber represents a lake or sea, in which are swimming all kinds of fish and other marine creatures. At each corner is a boat, containing fishermen fishing in different ways, with nets, hand-net, harpoon, and (probably, for one corner of the mosaic is destroyed) hook and line. The border of this mosaic is interesting. At each corner is a vase from which a long stalk of a water plant extends along the sides of the room until it almost meets the similar plant coming from the vase in the adjacent corner. In the space between the plants is on each side of the room a crown with a double row of beads upon four rays. The apse is adorned with flowers, baskets of fruit, two ducks, and a deer which lies in the middle. The walls of the apse were once adorned with mosaic, but only enough of this is left to make it probable that a marine view was represented. The threshold between the antechamber and the *oecus* is occupied by two nymphs between two seated rivergods (?). These correspond in a way to a colossal head of Oceanus, which was probably at the other side of the antechamber where the mosaic is nearly destroyed. In the *oecus* itself a geometrical pattern forms a border, leaving a large white space in which is a T-shaped mosaic, the crossbar touching the threshold. In the crossbar are fourteen medallions, each containing a bird or a fish. In the upright part of the T is a large medallion surrounded by eight smaller ones. In the smaller ones are wild animals, while the larger one contains a representation of Ganymedes carried away by the eagle. The young shepherd, half upright and half kneeling on a rock, gives himself up to the eagle, who carries him tenderly. The mosaicist seems to be inspired by the masterpiece of Leochares. The attitude is more natural than in the Vatican marble, but the manner of execution shows that the mosaic is a servile copy of some well-known model. At the right and left of the *oecus* are two wings. In the wing at the right the original mosaic is covered by a later one. This dates probably from the end of the second century after Christ, and is inferior to those of earlier date. It is a large geometrical composition, with hexagonal medallions enclosing fish, and perhaps a central scene. In the wing at the left is a remarkable representation of the triumph of Bacchus, conqueror of the Indians. The god stands in his chariot drawn by four tigers. He is clad in a long robe with sleeves, while beside him stands a nude Victory. Behind the chariot is a satyr, and before it go two maenads, one beating a tambourine, while the action of the other is lost, owing to an injury to the mosaic. In the foreground a little cupid is riding a lion and the spotted panther of the god is drinking out of a bowl. The border is a luxuriant vine with many clusters of grapes. Large birds stand upon the branches of the vine, and winged cupids are picking grapes with which large baskets are filled. These also stand upon the branches. This whole mosaic is remarkable for its liveliness and its excellent execution. Except that the maenad with the tambourine is disproportionately large, the per-

spective is satisfactory. Probably a celebrated painting is reproduced, and the mosaicist is worthy of the original artist. The date of these mosaics is probably the early part of the second century after Christ.

Inscriptions of Lambaesis.—In new investigations made by the French School at Rome in the remains of the ancient camp at Lambaesis, some new inscriptions have been discovered, and others have been revised and supplemented.

(1) A pedestal, 1.30 m. in height, 0.83 cm. in length, 0.70 cm. in thickness, contains the following:

[I]mp(eratori) Caes[ari] | T(ito) Aelio Hadriano | Antonino Aug(usto) Pio | pontifici maximo | trib(unicia) pot(estate) X | imp(eratori) II co(n)s(uli) IIII p(atri) p(atriciae) | dedi[c]ante | L(ucio) Novio Crispino | leg(ato) Aug(usti) pr(o) pr(aetore) | T(itus) Flavius T(iti) f(ilius) Tromen(tina) | Firmus Salona p(rimi)p(ilus) leg(ionis) tertiae Aug(ustae).

This inscription is given in an incomplete form in *C.I.L.* VIII, 2542. The date is 147 A.D.

(2) A fragment of the following inscription was published by R. Cagnat in 1893 in *Bull. Arch. du Comité des Travaux Historiques*. It has been amplified by recent discoveries.

Imp(eratori) Caes(ari) Mar(co) Aur(elio) Seve(ro) [Alexandro] inv(icto) pio Au(gusto) pont(ifici) max(imo) p(atri) p(atriciae) proc(onsuli) divi mag(ni) Anto(nini) f(ilio) dir(i) Pi(i) Sev(eri) [n(epoti)] eq(uites) leg(ionis) tertiae [Augustae devoti numini maiestatique] eius.

(3) In the same place in which the fragments of the preceding inscription were discovered a pedestal was found, containing a list of names evidently of soldiers, probably of the equites of the third legion referred to in the inscription just mentioned.

(4) Another pedestal, measuring 0.80 cm. high, 0.40 cm. long, 0.40 cm. thick, contains on one face *divo Caro*,—the Emperor Carus (A.D. 282, 283). On the other face is found *Genio | tribuni | cial(i) | Quintus Flavius | Balbus | tribunus laticlavus | militum legionis | tertiae Augustae piaevindicis*.

Outside of the Roman camp a fragment of a sepulchral inscription was found upon a stone measuring 1.12 m. in length, 0.52 m. in height, 0.34 m. in thickness, forming part of a mausoleum. The inscription is as follows: *Aufidio Lucio centurioni l(egionis) tertiae Augustae evoca]to in tertia Gallica o... [vixit annis]... | mensibus II diebus V Vaternia Agrippina [coniux fecit]*. The first two lines are in large letters, while the letters of the third line are quite small.

Inscriptions at Tebessa.—Certain inscriptions on stelae dedicated to Saturn now in the museum at Tebessa have been carefully examined, and some corrections have been made in the readings which appear in the *C.I.L.*

Thus *C.I.L.* VIII, 2190, should read *Saturno Augusto Avianus | Narnitas votum solvit libens | animu*.

Again, *C.I.L.* VIII, 16697 should read *G(aius) Po|mpo|ni(us) F|elic|ius sac|erd|os Saturno a . . . | aug(usto) sacrum f|eci(t) votum sol|vit lib(ens) anim(o)*.

The *a* after *Saturno* has been regarded by some as *n* for *nostro*, by others as the beginning of the word which introduces the next line. The form is *A*. (*Mél. Arch. Hist.* Juillet-Décembre, 1897, pp. 441-465.)

EARLY CHRISTIAN AND MEDIAEVAL ART

Church of the Holy Sepulchre at Jerusalem.—In the *C. R. Acad. Insc.* 1897, pp. 457-466, is an article by Philippe Berger, on the mosaic from Madaba. The middle of the city of Jerusalem was, at the time when the mosaic was made, occupied by a forum adorned with colonnades. At the western end of this forum was a domed structure, which can be nothing else than the church of the Holy Sepulchre. From a careful examination of the mosaic, it appears that the dome was not over the front part of the church, but rather farther back, the front having a façade with columns, such as is appropriate for a rectangular structure. Two reproductions of the plan of Jerusalem are given.

Inscription in Cufic Characters.—In the *C. R. Acad. Insc.* 1897, pp. 533-536, Clermont-Ganneau publishes and discusses an inscription in Cufic characters found in Jerusalem. It relates evidently to the mosque of Omar, erected in the tenth century in the vestibule of the basilica of Constantine. The inscribed block was found *in situ*, and is therefore of importance in determining the exact position of the mosque and basilica.

Mosaic Inscriptions from Salonichi.—In the *Athen. Mitth.* XXII, 1897, pp. 463-472, pls. xv, xvi, J. Kurth publishes and discusses mosaic inscriptions from the churches of St. Sophia and St. George at Salonichi. In 1525 St. Sophia was turned into a mosque. Seven years ago it was partially burnt, and in 1897 Kurth was permitted to copy all the inscriptions. St. George, which was also turned into a mosque, had its inscriptions "restored" in 1889 by Rossi. The author was assisted in his work by Dr. Mordtmann, and gives here a preliminary report, together with facsimiles of the texts. There are monograms with the name *Κωνσταντίνου*, as also *Θεοφίλου δεσπότης*, and *Κίριε βοήθει*.

The Mosque of the Kalenders at Constantinople.—In *Archæologia*, LV, 1897, pp. 431-438, is a paper by Edwin Freshfield on the church now called the mosque of the Kalenders at Constantinople. The paper was originally read before the Society of Antiquaries, April 7, 1881, but its publication has been delayed by the difficulty in getting the necessary photographs. Eleven fine plates are the result of the delay. A plan and three sections are inserted in the text. The church was erected not earlier than the eighth and not later than the tenth century. It has a double narthex, with gallery for the women over the inner narthex. The dome is raised on a drum supported by pendentives. The eastern end of the building is now

square, but had originally an apse. The interior retains, in a measure, its original marble decoration, though there is no trace of the decoration of the dome, which was undoubtedly mosaic. The walls which divide the hieron from the prothesis on the north and the diaconicon on the south are entirely covered with marble. The remains of the iconostasis or picture-screen are still *in situ*. The screen was richly adorned with marble and carving. It undoubtedly resembled other Byzantine screens, one of which, from the church of St. Luke at Stiri, is published for comparison. The original name of the church is unknown. Paspatis suggested that it may have been the church of the monastery of Valens.

Ἐπαρχος Ῥώμης.—In the *R. Arch.* XXXI, 1897, pp. 109–114, E. Cuq discusses certain weights of Byzantine origin with the legend Ἐπαρχος Ῥώμης. The name *Rome* was applied to Constantinople under the later emperors, the form *New Rome* being used only when it was necessary to distinguish Constantinople from *Old Rome*. The Ἐπαρχος Ῥώμης was then an officer at Constantinople. That his title is found on weights discovered in Egypt is due to special rules adopted to insure correctness in that province, where the weights were sometimes tampered with. That these weights are of glass is probably a survival of an old Egyptian habit.

Byzantine Ivory Reliefs.—As evidence that the Byzantines endeavored to revive their waning art from the ninth to the twelfth century by a closer study of antique models, a number of Byzantine ivories are described by Hans Graeven, representing subjects from Greek mythology or hunting scenes, for which direct prototypes may be found in miniature painting, mosaics, reliefs, or coins of the classic period. (*Jb. Preuss. Kunsts.* 1897, pp. 3–23.)

Gilding on Glass beneath the Glaze.—The technique of glazing over gilded decorations on glass, known to the early Christians and Byzantines, became a lost art in the Middle Ages and Renaissance. It was revived in the seventeenth century, and found a distinguished representative in Joseph Mildner, in Southern Austria, at the end of the last century. (*Mith. K. K. Oest. Mus.* 1897, pp. 511–526.)

The Holy Lance.—In the *R. Art Chrét.* 1897, pp. 287–302, F. de Mély completes his series of articles upon the holy lance, by giving the history of the lance, now in the possession of the Emperor of Austria at Vienna.

Acoustic Vases in the Middle Ages.—The use of vases for acoustic purposes by the Greeks and Romans in their theatres and public buildings, though described by Vitruvius, has been discredited by modern writers. M. Donnet, however, is a firm believer in the statements of Vitruvius, and cites a number of examples, showing that the practice survived through the Middle Ages and the Renaissance in France, Denmark, Sweden, and Russia. He has recently found them in a fifteenth-century church in Belgium. His volume is entitled *Les poteries acoustiques du couvent des Récollets à Anvers*. De Backer, Anvers, 1897. (*R. Art Chrét.* 1897, pp. 518–519.)

ITALY

The Church of San Domenico at Bologna.—San Domenico died August 6, 1227, and was canonized July 11, 1233. The church of San Domenico, at Bologna, is mentioned in the archives as early as 1240, from which may be inferred its foundation between 1234 and 1240. It was not a new church, but an enlargement of a preëxisting church of S. Nicolo delle Vigne. (F. M. VALERI in *Repert. f. Kunstwiss.*, 1897, pp. 173-193.)

Santa Maria at Civita Castellana.—The church of Santa Maria at Civita Castellana is one of the most interesting examples of Cosmati architecture and decoration.

An inscription over the principal doorway reads thus:

LAVRENTIVS · CVM · IACOBO · FILIO · SVO ·
MAGISTRI · DOCTISSIMI · ROMANI · HOC · OPVS ·
FECERVNT ·

Laurentius was the grandfather, and Iacobus, the father of Cosmatus, whose name appears upon the architrave of the portico, with the date MCCX.

Cosmatus had four sons—Lucas, Iacobus, Deodatus, and Ioannes—who continued this charming decoration, which is still known by their father's name. (G. CLAUSE in *Rev. Art Chré.* 1897, pp. 271-279.)

Mediaeval Architecture.—In the *Architectural Record*, Professor Goodyear continues his important chapters on certain peculiarities of mediaeval architecture. In Vol. VII, No. 1, is an article entitled 'A Discovery of Entasis in Mediaeval Italian Architecture.' Here he shows that in mediaeval Italian churches, columns and piers exhibited the peculiarity of entasis, hitherto supposed to be confined to classic and Renaissance architecture. Entasis is especially to be observed in centres where Byzantine influence was strong.

In Vol. VII, No. 2, under the title 'An Echo from Evelyn's Diary,' he treats of leaning walls. From this diary, under the date of July 27, 1665, it appears that the old St. Paul's, London, was built with walls which had an outward lean. Some architects of the day, amongst whom may be mentioned Mr. Chicheley and Mr. Prat, held that the walls had been so built designedly for an effect in perspective, whereas John Evelyn and Sir Christopher Wren insisted that the foundations of the walls had settled. In lofty cathedrals, walls of the nave, if perfectly vertical, would appear to the spectator from below to be narrower at the top than at the base. To correct this optical effect, the mediaeval architects frequently gave an outward lean to the walls, so that the nave was wider at the summit than at the base. Mr. McKecknie's photographs make this especially evident for the nave of St. Mark's at Venice, for the cathedrals at Arezzo, Cremona, Trani, and S. Ambrogio, Milan. The outward lean affects also the piers and columns of the nave. This outward spread of the walls and piers, near the summit,

could not have been produced by the thrust of the vault without disturbing the masonry, or, in the case of St. Mark's, the mosaic decoration. At Arezzo and Trani, moreover, the cathedrals have wooden roofs. The outward spread would therefore seem to have been designed for the sake of perspective effect.

In Vol. VII, No. 3, under the title 'The Leaning Tower of Pisa,' Professor Goodyear shows that not merely are leaning towers more common than is generally supposed, but that the façades of many cathedrals, especially those of Pisa, Ferrara, and St. Mark's, in Venice, have the outward lean. This, again, is a peculiarity of classic architecture observed by Penrose in connection with the Parthenon, and specifically mentioned by Vitruvius. But it is interesting to find the peculiarity lingering in the mediaeval period.

In instances where Byzantine influence is strongest, as at Pisa and in Venice, the leaning tower and the façades have not merely the outward tilt, but a sort of entasis, the outward tilt at the base being corrected by a reversal of the lean toward the summit.

Castel del Monte in Apulia.—The *C. R. Acad. Insc.* 1897, pp. 432-449, contains an article by E. Bertaux on Castel del Monte and the French architects of Emperor Frederick II. The castle, begun in 1240, has the characteristics of the architecture of Burgundy and Champagne. It may not be certain that the French officer and architect, Philippe Chinard, who had been in Cyprus and Corfu, and was at that time in Italy, was the architect of Castel del Monte; but it is certain that the Emperor Frederick employed French architects in Apulia, not only for that castle, but also for other buildings.

FRANCE

Mounted Warrior carved from a Whale's Jawbone.—A. Maignan (*R. Arch.* XXXI, July-August, 1897, pp. 115-124; 2 cuts) publishes and discusses a mounted warrior, carved from a whale's jaw, found in 1895 at Amiens. The work is somewhat rude, the horse being more life-like than the rider. The horse's legs, part of his head, and his croupe are wanting. Details of armor and trappings are carefully given. The nearly rectangular shield is adorned with large rosettes. Similar figures in various materials are cited in comparison. Some of these are as early as the fourth century, others much later. This figure probably belongs to the eleventh century, and Molinier's opinion that it was a chessman may well be correct; for, although its size (originally some 0.16 m. in height and length) is unusual, large chessmen were not unknown.

BELGIUM

Frescoes of the Leugemete Chapel at Ghent.—The ancient chapel (now a brewery) in the Rue de la Porte Bruges once contained frescoes assumed by various art historians to date from the thirteenth or early

fourteenth century. These frescoes have been considered especially valuable for the history of costumes, weapons, and military organization. Dr. D. Joseph, in the *Rep. f. K.*, 1897, pp. 293-297, shows that so early a date for these frescoes is impossible, and that their authenticity may at least be called in question.

ENGLAND

Prebendal Stalls and Misericords in Wells Cathedral. — In *Archæologia*, LV, 1897, pp. 319-342, is a paper, by C. M. Church, on the prebendal stalls and misericords in the cathedral church of Wells. This paper, which is illustrated by four plates and two figures in the text, was read before the Society of Antiquaries March 12, 1896. The history of the stalls is traced, their number and original arrangement in choir and chapter determined, and the carved "misericords" or "misereres" still remaining in the stalls are described. These seats are the sole survivals in the church of the woodwork furniture of the fourteenth century, and they rival those of Winchester in richness and variety of design and depth of carving. Twenty-two are carvings of the forms of men, women, and angels, natural or grotesque. Forty-two are carvings of birds and beasts, natural, conventional, monstrous, or grotesque.

Illuminated Psalter. — At the meeting of the Academy of Inscriptions, July 23, 1897, L. Delisle commented on a magnificent psalter (French work of the thirteenth century) belonging to the Earl of Crawford. It bears the signature Jahanne Reyne. This is Jeanne of Navarre, daughter of Charles the Bad, wife of Jean de Montfort and afterwards of Henry IV of England. The Bible in three volumes, now divided among the *Bibliothèque Nationale*, the British Museum, and the Bodleian Library, has the signature La R. Jahanne in a similar handwriting. This Bible is known to have belonged to Jeanne de Navarre. (*C. R. Acad. Insc.* 1897, p. 373; *Bibl. École Chartes*, 1897, pp. 381-393).

ALGERIA

Kalaa of Beni Hammed. — Professor Blanchet, of the *lycée* of Constantine, has investigated some of the monuments of the Kalaa of Beni Hammed, founded in 1007 in the mountains of Hodua (province of Constantine). The mosque was divided into a court and a sanctuary. It was richly adorned with columns, mosaics, and a cornice of turquoise-blue enamel. In the castle of Fanal, enamelled fragments were found sufficient for the reconstruction of the mural decoration, the geometrical fancies of which are found also in the cathedral of Amiens and the campanile at Florence. In the palace of the emirs are numerous traces of *cloisonné* ornamentation, enamel set into stone. These discoveries may throw light upon the origin of some peculiarities of Sicilian art. They also prove that oriental *faiences* existed in the eleventh century. (*C. R. Acad. Insc.* 1897, pp. 467-469).

RENAISSANCE ART

ITALY

Tuscan and North Italian Artists in the Service of the House of Aragon in Naples.—Three times during the fifteenth century was there an influx of foreign artists at Naples. The last of these took place during the reign of Alfonso II, and forms the subject of a careful study by C. von Fabriczy in *Rep. f. K.* 1897, pp. 85-120. The city archives of Naples contain many hundred volumes, recording the receipts and expenditures of the Court, entitled *Cedole di tesoreria*. One hundred and sixty-seven of these volumes are examined for this period, and valuable documentary evidence secured in reference to the work of Giuliano da Majano, Benedetto da Majano, Ippolito Donzello, Giuliano da San Gallo, Francesco di Giorgio Martini, Fra Giocondo da Verona, Guido Mazzoni, Calvano da Padova, Giacomo della Pila, Aristotile Fioravante, Francesco da Laurana, Mattia Fortimany, and Antonio Marchissl.

Bronze Gates of St. Peter's at Rome.—In the *Rep. f. K.* 1897, pp. 1-22, Bruno Sauer describes in detail the subjects of the borders of the bronze gates of St. Peter's. Although the sculptor, Filarete, in his treatise on architecture, sets forth an orderly composition of similar decorative work, in this instance he seems to have selected his subjects at random. They evince the spirit of an ardent classicist, who has omitted all Biblical subjects. The scenes represented are chiefly Greek, though some are Roman; and his sources appear to have been Aesop, Ovid, Livy, Valerius Maximus, and Virgil, but he also borrowed from ancient sculpture in some of the portraits and in the composition of some of the reliefs.

The Marble Altarpiece in the Abbey Church of S. Maria di Campomorto.—In *Il Focolare*, 1896, Nos. 7 and 8, Diego Sant' Ambrogio describes in detail the marble altarpiece in the abbey church of S. Maria di Campomorto. The chief subject of the altarpiece is the Assumption of the Virgin. It was made at some time during the period from 1490 to 1518, and resembles the altarpiece of the Adoration in the Chapter House of the Padri of the Certosa at Pavia, and the Descent from the Cross in the Chapter House of the Conversi in the same church. These altarpieces are attributed to the brothers Mantegazza. (C. v. F. in *Rep. f. K.* 1897, pp. 169-170.)

The Sculptor of the S. Abondio Altar in the Cathedral of Como.—Recent documents have shown that the altarpiece in the church of B. V. Assunta (S. Lorenzo), at Morbegno, was painted by Gaudenzio Ferrari between the years 1520-1526. The strange resemblance to this altarpiece exhibited by the sculptured altar of S. Abondio in the cathedral at Como indicates that the latter is by the same author. (A. G. MEYER, in *Rep. f. K.* 1897, pp. 147-150.)

Giotto's Birthplace.—A short time ago it was proposed to set up a monument to Giotto at Vicchio in the Mugello. This gave rise to a dispute

as to the birthplace of Giotto. Jodoco del Badia presented a document from which he made a somewhat hazardous inference that Giotto was born in the district of Santa Maria Novella, Florence, but the notary records (*Protoc. d. Not. Francesco di Pagno*, Vol. I, under the date April 7, 1329, and March 31, 1331) render it certain that the famous painter was born at Colle, near Vespignano. (R. DAVIDSON, in *Rep. f. K.* 1897, pp. 374-377.)

Botticelli's Primavera.—A new attempt at interpreting Botticelli's famous painting, formerly known as *The Allegory of Spring*, is made by Emil Jacobsen in *Arch. Stor. d. Art.* 1897, pp. 321-340.

Following the suggestions of Warburg and Ulmann, Jacobsen interprets the painting through the assistance of Poliziano's poem *La Giostra*.

The central figure, he supposes, commemorates Simonetta Cattaneo, the beautiful wife of Marco Vespucci, beloved by Lorenzo and Giuliano de' Medici. She is entering upon the Elysian fields, where in the foreground the nymph Simonetta is exhibited as making her escape from Zephyr, as distributing flowers, and as one of the Graces. He accordingly suggests as a title for the painting, *The Awakening of a Soul to a New Life*.

Antonello da Messina.—In the *Rep. f. K.* 1897, pp. 347-361, G. Gronau indicates the sources for a biography of Antonello da Messina. These consist of directly related documents, of dates inscribed on his pictures, and of statements of fifteenth and sixteenth century writers. It results that Vasari is altogether untrustworthy in his biography of Antonello. Evidence is given to show that Antonello probably became acquainted with Flemish methods in Naples through his master Colantonio.

Gelli's Lives of Artists.—In the *Arch. Stor. Ital.* 1896, No. 1, pp. 32-60, appears the first instalment of Gelli's *Vite d'Artisti*. The manuscript of this sixteenth-century work, giving twenty biographies of artists, has remained unedited in the Strozzi library. Now that it is being published, it appears to be a literary compilation without much independent value. The author seems to have utilized the works of Ghiberti, Billi, Anonimo X, and Vasari. (G. GRONAU, in *Rep. f. K.* 1897, pp. 23-31.)

Italian Paintings at Munich.—The appearance of the sixth edition of the Catalogue of the Gallery of Ancient Paintings in Munich has led E. Jacobsen to criticise many of the new attributions, and to defend others in the *Rep. f. K.* 1897, pp. 425-442.

FRANCE

Ecce Homo at Dijon.—In the Palais de Justice, there is a minutely painted panel, representing an *Ecce Homo*. This work has been connected with the names of Van Eyck and of Roger van der Weyden. In the *R. Art Chré.* 1897, pp. 496-498, H. Chabeuf attributes the painting to a local artist.

GERMANY

The Finest German Printer's Signet of the Fifteenth Century.—Attention has been called by Professor G. Bauch of Breslau to the fine

printer's signet of Conrad Kachelofen, at the end of M. Lochmeier's *Parochiale curatorium*, published by him at Leipzig, 1497. This is shown by Max Lehrs in *Rep. f. K.* 1897, pp. 151-153, to have been copied with slight variations from one of Schongauer's Wappenbilder.

Hirsfogel's Relation to Herberstein's Works.—The celebrated Austrian diplomat, Freiherr Sigmund von Herberstein, late in life wrote several books which were interesting also for their copper plates and woodcuts. The first Latin edition of his work on Russia, published in Vienna, 1549, is now exceedingly rare. This edition contains twelve colored engravings by Hirsfogel, dating from 1546-1547. Uncolored copies of some of these engravings exist in museums of Berlin and Dresden. Seven of them were afterwards published as medallions, both in copper plate and woodcut, in some of Herberstein's later works. (*A. NEHRING in Rep. f. K.* 1897, pp. 121-129.)

Meister Hans of Schwaz.—In the *Rep. f. K.* of 1895, Max J. Friedländer enumerates twenty paintings, which he attributes to Meister Hans of Schwaz, a portrait painter of the sixteenth century. Six additional portraits are now added to this list. (*Rep. f. K.* 1897, pp. 362-365.)

Albrecht Dürer.—In the *Rep. f. K.* 1897, pp. 443-463, Paul Kalkoff makes a special study of Dürer's visit to the Netherlands, and his relation to the thinkers of the Reformed Church.

Georg Pentz and the Master J. B.—In the *Rep. f. K.* 1897, pp. 130-132, Max J. Friedländer calls attention to the fact that the engravings signed J. B., and dating from the years 1523, 1525, and many from 1528 to 1530, bear a close similarity in style to those signed G. P., dating from 1534 and later. Friedländer assigns various reasons which make it probable that the Master J. B. was Georg Pentz, the earlier signature representing another form of the same name, Jörg Bentz. This interesting identification is called in question by Gustave Pauli in *Rep. f. K.* 1897, pp. 298-300, who holds that the works of J. B. and Georg Pentz, though resembling each other in certain respects, differ sufficiently in style to be the work of different artists.

Hans Sebald Beham.—Rosenberg and Seibt, who have written about the painter and engraver Sebald Beham, exhibit considerable uncertainty as to his whereabouts during the period from 1525-1534. In the *Rep. f. K.* 1897, pp. 194-205, Dr. Alfred Bauch proves that during this period Beham still lived in Nuremberg.

Hans Morinck.—Although mentioned in some of the older books, this artist was almost completely lost to sight until made known by Kraus in the *Kunstdenkmäler Badens*, 1887. Born in the Netherlands, and having studied in Italy, this sculptor spent thirty-eight years of his life at Constance, where most of his works are found, and where he died in 1616. Twenty-four of his sculptured works are described by Fritz Hirsch in *Rep. f. K.* 1897, pp. 257-292.

BELGIUM

Painting by Peeter Brueghel.—A remarkable discovery has been made in the Brussels Musée de Peinture. In the year 1845 the state bought for 500 francs a picture attributed to Peeter Brueghel, the so-called "Höllen-Brueghel" (1564-1638), representing the fall of the rebel angels from heaven. At the new ordering of the pictures in 1882 the painting was ascribed to the Flemish artist Hieronymus Bosch (1462-1516). During the present year a fresh arrangement of the collection was undertaken, and when the picture was taken out of the frame on which the name of Bosch was inscribed, Professor Wauters detected at the very bottom of the painting in small and scarcely legible characters, the inscription, Bruegel. MDLXII (1562). It is thus evident that it is a work of the old Peeter Brueghel, the so-called "Bauern-Brueghel" (1520-1569), whose pictures are extremely rare. (*Athen.* October 2, 1897; cf. *Rev. Art Chrét.* 1897, p. 545.)

ENGLAND

The Malcolm Collections of Italian Drawings.—The Malcolm collection of Italian drawings, consisting of several hundred examples, is now possessed by the British Museum and forms the subject of an article by Carlo Loesser in the *Archiv. Stor. Arte*, 1897, pp. 341-359.

ABBREVIATIONS

Acad. = Academy (of London). *Am. J. Arch.* = American Journal of Archaeology. *Ami d. Mon.* = Ami des Monuments. *Ann. d. Ist.* = Annali dell' Istituto. *Arch.-Ep. Mitth.* = Archäol.-epigraph. Mittheil. (Vienna). *Arch. Anz.* = Archäologischer Anzeiger. *Arch. Rec.* = Architectural Record. *Arch. d. Miss.* = Archives de Missions Scientifiques et Littéraires. *Arch. Stor. d. Art.* = Archivio Storico dell' Arte. *Arch. Stor. Nap.* = Archivio Storico Provincie Napolitane. *Athen.* = Athenaeum (of London).

Berl. Phil. W. = Berliner Philologische Wochenschrift. *Berl. Stud.* = Berliner Studien. *B. Arch. d. M.* = Bulletin Archéol. du Ministère. *B. Arch. C. T.* = Bulletin Archéologique du Comité des Travaux hist. et scient. *B. C. H.* = Bulletin de Correspondance Hellénique. *B. M. Soc. Ant. Fr.* = Bulletin et Mémoires de la Société des Antiquaires de France. *B. Com. Roma* = Bullettino d. Commissione Archeologica Comunale di Roma. *Bull. d. Ist.* = Bullettino dell' Istituto. *B. Arch. Crist.* = Bullettino di Archeologia Cristiana. *B. Paletn. R.* = Bullettino di Paleontologia Italiana. *Byz. Z.* = Byzantinische Zeitschrift.

Chron. d. Arts = Chronique des Arts. *Cl. R.* = Classical Review. *C. R. Acad. Insc.* = Comptes Rendus de l'Académie des Inscriptions et Belles-Lettres. *C. I. A.* = Corpus Inscriptionum Atticarum. *C. I. G.* = Corpus Inscriptionum Graecarum. *C. I. G. S.* = Corpus Inscriptionum Graeciae Septentrionalis. *C. I. L.* = Corpus Inscriptionum Latinarum. *C. I. S.* = Corpus Inscriptionum Semiticarum.

Δελτ. 'Αρχ. = Δελτίον 'Αρχαιολογικόν.

'Εφ. 'Αρχ. = 'Εφημερίς 'Αρχαιολογική. *Eph. Epig.* = Ephemeris Epigraphica.

Gaz. B. A. = Gazette des Beaux-Arts.

I. G. A. = Inscriptiones Graecae Antiquissimae, ed. Roehl. *I. G. Ins.* = Inscriptiones Graecarum Insularum. *I. G. Sic. It.* = Inscriptiones Graecae Siciliae et Italiae.

Jb. Arch. I. = Jahrbuch d. k. d. Archäol. Instituts. *Jb. Preuss. Kunts.* = Jahrbuch d. k. Preuss. Kunstsammlungen. *Jb. V. Alt. Rh.* = Jahrbücher des Vereins von Alterthumsfreunden im Rheinlande. *J. Asiat.* = Journal Asiatique. *J. Am. Or. S.* = Journal of American Oriental Society. *J. H. S.* = Journal of Hellenic Studies.

Kb. Wd. Z. Ges. K. = Korrespondenzblatt der Westdeutschen Zeitschrift für Geschichte und Kunst. *Kunstchron.* = Kunstchronik.

Mél. Arch. Hist. = Mélanges d'Archéologie et d'Histoire (of French School in Rome). *Athen. Mitth.* = Mittheilungen d. k. d. Archäol. Instituts, Athen. Abth. *Röm. Mitth.* = Mittheilungen d. k. d. Archäol. Instituts, Röm. Abth. *Mon. Antichi* = Monumenti Antichi (of Accad. d. Lincei). *Mon. Mém. Acad. Insc.* = Monuments et Mémoires pub. par l'Acad. des Inscriptions, etc. *Mus. Ital.* = Museo Italiano di Antichità Classiche.

Not. Scavi = Notizie degli Scavi di Antichità. *Num. Chron.* = Numismatic Chronicle. *N. Arch. Ven.* = Nuovo Archivio Veneto.

Pal. Ex. Fund = Palestine Exploration Fund.

Rend. Acc. Lincei = Rendiconti d. r. Accademia dei Lincei. *Rep. f. K.* = Repertorium für Kunstwissenschaft. *R. Arch.* = Revue Archéologique. *R. Crit.* = Revue Critique. *R. Art Chrét.* = Revue de l'Art Chrétien. *R. Hist. d. Rel.* = Revue de l'Histoire des Religions. *R. Or. Lat.* = Revue de l'Orient Latin. *R. Ét. Gr.* = Revue des Études Grecques. *R. Num.* = Revue Numismatique. *R. Sémit.* = Revue Sémitique. *R. Ital. Num.* = Rivista Italiana Numismatica. *R. Stor. Ital.* = Rivista Storica Italiana.

Sächs. Ges. = Sächsische Gesellschaft (Leipsic). *S. G. D. I.* = Sammlung der Griechischen Dialekt-Inscripfen. *S. Rom. d. Stor. Pat.* = Società Romana di Storia Patria. *S. Ant. Fr.* = Société des Antiquaires de France. *Soc. Ant.* = Society of Antiquaries. *S. Bibl. Arch.* = Society of Biblical Archaeology.

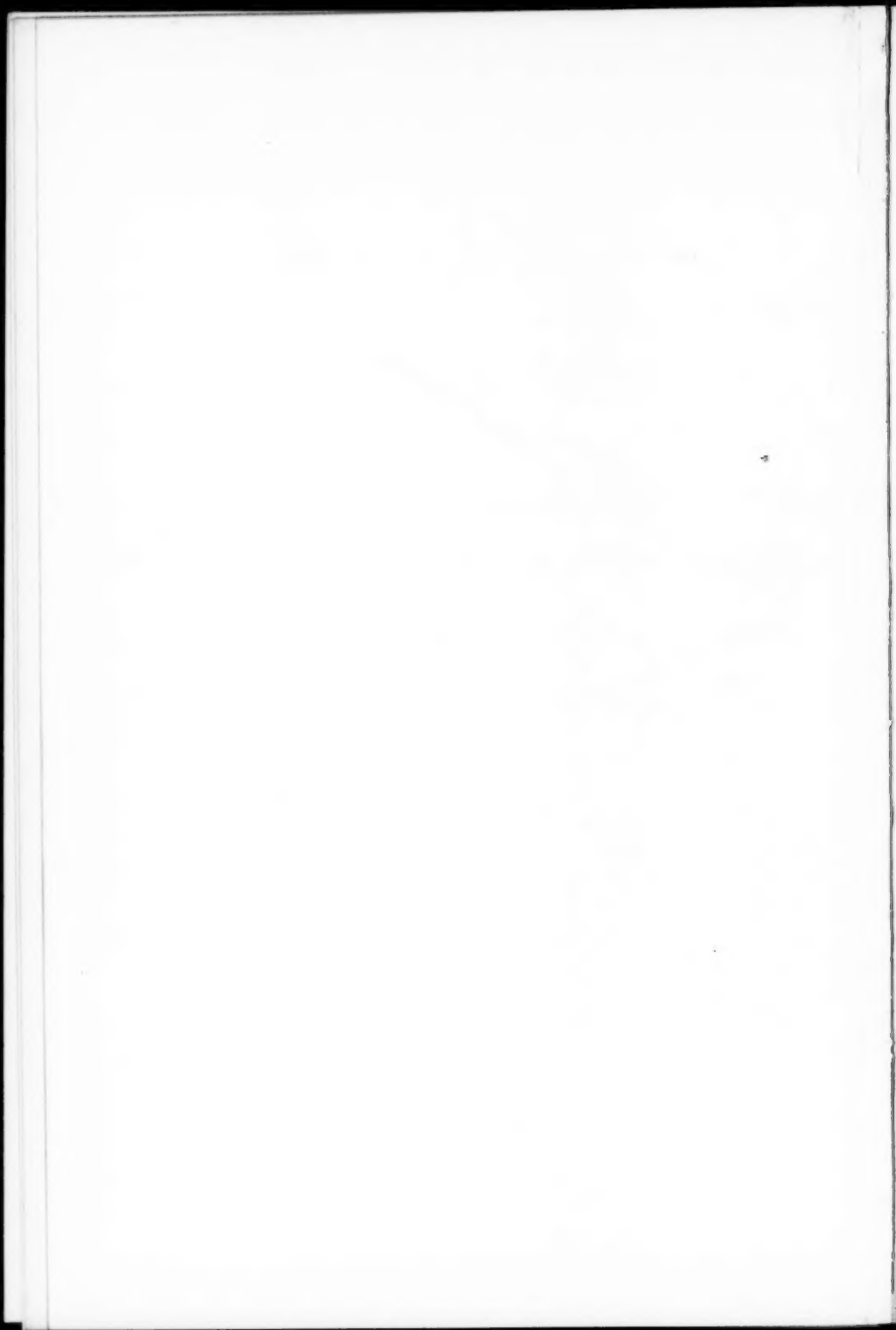
Z. D. Pal. V. = Zeitschrift des deutschen Palestina Vereins. *Z. Assyr.* = Zeitschrift für Assyriologie. *Z. Bild. K.* = Zeitschrift für Bildende Kunst. *Z. Num.* = Zeitschrift für Numismatik.





WASHIM PAPYRUS OF ILIAD 1-68

(Original size)



THE WASHÎM PAPYRUS OF *ILIAD* Θ 1-68

[PLATE XII]

A COLLECTION of Greek papyri has recently come into my hands from Asiût, Egypt, and among the pieces is a Homeric fragment of considerable antiquity, which should be made to contribute its mite to the history of the Homeric text. These papyri, which came into my possession through the kindness of Dr. James Henry Breasted, are said to have been uncovered in the vicinity of Washîm,¹ a mound in the Fayûm, where they were found lying in the ruins of sand-buried houses, sometimes in sacks, sometimes loose in the corners of the rooms. Not all were found in the same house, but all, I am assured, come from this one site.

Among these are very many dated pieces, chiefly corn receipts, of which there are no less than ninety, nearly all gratifyingly complete, some few in careful, almost uncial writing, but the majority, of course, in hasty cursive, and abbreviated. The usual date on the pieces is 158-159 A.D.; thus, in no. 11,

CTE[P]MATWN ΔΕΥΤΕΡΟΥ ΚΑΙ ΕΙΚΟCTΟΥ L
ANTWN[I]NOY ΚΑΙCΑΡΟC TOY KYPIOY

or, as it usually appears,

L KB αντωνεινου καισαρος του κυριου.

Almost the whole collection of corn receipts seems to come from this period. There are other dated pieces among the frag-

¹ The Kûm Ushîm excavated by Hogarth and Grenfell in 1895 and identified with the ancient Karanis; cf. Egypt. Exp. Fund, *Archaeol. Rep.* 1895-96, p. 16.

American Journal of Archaeology, Second Series. Journal of the
Archaeological Institute of America, Vol. II (1898), No. 5.

ments. One of these, an address in rude uncials to Theodorus, has an endorsement in cursive, dated the seventh year of Antoninus Caesar, the thirtieth of the Egyptian month Mechir, *i.e.* February 24, 144 A.D.:

Λ Ζ αντωννου καισαρος του κυριου
μεχειρ λ

It will be seen that these dated pieces suggest for the Homer fragment in question a date not later than 159 A.D.; and with this in mind as a provisional date, we may approach the evidence of the papyrus itself.

This piece of papyrus is rather thick, full of holes, and measures 0.22 m. by 0.174 m. in extreme dimensions. It formed part of a roll, inscribed on one side only, in columns 0.16 m. in height, each containing thirty-three lines. Parts of two such columns remain, giving us the closing words of the lines of one and the opening words of those of the other, but in no case preserving a complete line. The second column is written over a juncture in the papyrus, where the maker overlapped two pieces in extending his roll. The hand is an even uncial, written with evident care. There are occasional accents and points of punctuation, with little to suggest that they are the work of a second hand, unless their sporadic occurrence be thus interpreted. Acute, grave, and circumflex accents all occur; the last with a diphthong being written so as to embrace both letters. I have observed no breathings. Of punctuation marks, the apostrophe,¹ the colon (high point), and possibly the period,² appear.³

¹ The apostrophe is used, though irregularly, to mark elision.

² One case seems to occur, in line 11. Perhaps at lines 20 (between θεοι and πασαι) and 66 (after ην) we have cases of the middle point — στυγμη μεση. The cases of the high point are clear, as indicated in the transcription.

³ The apostrophe occurs in the Louvre fragment of Z, which is assigned to a date early in our era. Mr. Grenfell finds the rough breathing and the acute accent in the Bodleian fragment of *Odyssey* ε, of the third century. In the fourth-century fragment of *Iliad* M belonging to the same library, there are occasional accents; and in marking elision, one apostrophe is used. There are instances of accents and punctuation in nos. VIII and XI of the first part of the *Oxyrhynchus Papyri*, which are from the first or second century. Of non-

Iota is adscript in datives: as in [ακροτατη]Ι, ΚΟΡΥΦΗΙ, line 3; ΑΥΤΗΙ, [θα]ΛΑCCHΙ, line 24; ΑΛΛΗΛΗCΙCΙ, line 63, etc. Ν, written after ΔΑΝΑΟΙCΙ, line 11, is marked for erasure. There seems to be no attempt at separating the letters into words. Of the character of the hand, it is enough to say that, letter for letter, it generally presents close resemblances to the writing of the Bankes papyrus of *Iliad* Ω. The strokes in the Bankes papyrus are perhaps a trifle finer, while its accents and punctuation, on the other hand, are far more clumsy and rude. These, however, it is agreed, are by a later hand, which is hardly the case with the accents of the fragment before us. One point of real difference between the two—almost the only point that interrupts this interesting correspondence—is in the matter of ι-adscript. The iotas adscript of the Bankes papyrus have been said to be the work of the hand that supplied the coarse punctuation and accents which so mar that manuscript. In our fragment, on the other hand, whatever might be thought of accents and points, the adscripts are pretty clearly the work of the first hand. This is evidenced by the appearance of ι-adscript with the second η of ἀλλήλησι, line 63; for had it been inserted by a late hand, the adjoining letters would inevitably have looked crowded, and of this there is no suggestion. Yet the resemblances of the two manuscripts remain sufficient, at least, to warrant the belief that they are the works of the same school of writing, and not far separated from one another in point of time.

The question of the date of the Bankes *Iliad* thus becomes one of much importance in the determination of that of our papyrus, for which the prevailing date of the corn receipts, 159 A.D., affords at best only a *terminus ad quem*. Between

Homeric literary papyri, it is enough to mention the Bacchylides papyrus, of the first century B.C., where accents and points, though used somewhat otherwise than in our papyrus, come from the first hand; cf. Kenyon, *The Poems of Bacchylides*, 1897, pp. xx, xxi. In the same papyrus the circumflex covers both vowels of a diphthong, as in the fragment before us. An examination of the facsimile of the Washim fragment, in proof, inclines Mr. Grenfell to the view that the accents, at least, are probably by a later hand. But this view is not supported by careful inspection of the papyrus itself.

the extremes of the dates that have been suggested for the Bankes papyrus, from three to four centuries intervene. Wattenbach,¹ in 1867, characterized it as perhaps the finest example preserved to us of old Alexandrian calligraphy in the time of the Ptolemies; La Roche² thinks it probably comes from the time of the last Ptolemies or the first century B.C., but may be one hundred years younger; Gardthausen,³ while he nowhere precisely dates the papyrus, considers it older than the Hyperides, and this again he regards as earlier than 150 A.D. The possibility that the Louvre fragments of *Iliad N*, which Silvestre assigned to the first century B.C., were found with the Bankes papyrus has been suggested by the editors of the Louvre fragments,⁴ and may serve as a further attestation of the earlier date. The same dating has lately been revived, in connection with a facsimile of a few lines of the papyrus, in Harper's *Classical Dictionary* (p. 840). An origin in the second century after Christ, however, has been maintained by Maunde Thompson, accepted by Blass, Leaf, and Van Leeuwen, and adopted as probable in the Palaeographical Society's first volume; while Wattenbach in the last edition of his *Anleitung* no longer defends the earlier date. With this determination as to the kindred manuscript, the evidence accompanying our papyrus readily combines, and we may with some confidence refer the fragment to the first half of the second century after Christ. I may add that Mr. Grenfell has kindly indicated to me his concurrence in the assignment of the papyrus to this period, or even to a date late in the first century. Dr. Krebs favors a date early in the second century, but his judgment, like Mr. Grenfell's, is based on an examination of the facsimile only.⁵

¹ *Anleitung zur griechischen Paläographie*, p. 5.

² *Homerische Textkritik*, p. 439.

³ *Griechische Paläographie*, p. 154.

⁴ *Notices et Extraits*, tome XVIII, pp. 110, 111.

⁵ The travels of the papyrus and, latterly, my own departure for Berlin, have combined to prevent my making a final collation of the fragment, with especial reference to accent and punctuation, as I had hoped to do in reading the first proofs. [This collation has been gladly undertaken by the Editor-in-Chief, with whom the author had left the papyrus before leaving the country. — EDITORS.]

COLUMN I

- ἥως μὲν κροκοπ]επλος ἐκίδνατο πᾶσαν ἐπ' αἰαν·
 ζεὺς δὲ θεῶν ἀγορή]ν ποιήσατο τερπικέραυνος
 ἀκροατῇ]ι κορυφῇ πολυδὲ[ιραδο]ς [οὐλυμποιο·
 αὐτὸς δὲ σφ' ἀγορεύει θ]εοὶ [δ' ὑπο παῖτ]ες ἀκούν·
 5 κεκλυτε μὲν πάντες τε θ]εοὶ [πάσαι τ]ε θέαι·
 7 μῆτε τίς οὖν θηλεία θεο]ς το[γέ μῆτε τί]ς ἄρσῃν
 πειρατῷ διακερσάι ἐμον] ἐ[π]ο[ς ἀλλ' ἀμ]α πάντες
 αἰνεῖτ' ὄφρα ταχίστα τελε]ύτ[ῃ]σω τ]ᾶδε ἔργα
 10 οὐ δ' ἂν ἐγὼν ἀπαυευθε] θεῶν [ἐ]θ[ε]λόντα νοήσω
 ἐλθόντ' ἢ τρῶεσσιν ἀρηγέμεν] ἢ δαναοῖσι·
 πληγὴς οὐ κατὰ κόσμον] ἐλ[ε]υσεται οὐλυμπόνδε
 ἢ μιν ἐλὼν ριψῷ ἐς τарт]αρον ἡεροεντα
 τῆλε μάλ' ἤχι βαθίστον ὑπο χθ]ονός ἐστι βερεθρον·
 15 ἐνθα σιδήρειαι τε πυλαὶ καὶ χαλκε]ὸς οὐδὸς
 τοσσον ἐνερθ' αἰδεῶ οσο]ν οὐρα[ν]ος ἐ]στ' ἀπο γα[ι]ης·
 γινώσκειτ' ἐπειθ' ὅ]σον εἰμ[ι] θεῶ[ν] κάρ]τιστος ἀ[π]αν[των]
 εἰ δ' ἀγὲ πειρησάσθ]ε[ι] θεοὶ ἵνα εἰδὲτ]ε πάν[τες]
 σείρην χρύσειον ἐ]ξ οὐ[ραν]οθ]εν [κρε]μασαντ[ες]
 20 πάντες δ' ἐξάπτει]θε θεοὶ πάσαι [τε θεα]ῖναι·
 ἀλλ' οὐκ ἂν ἐρυσσάιτ'] ἐξ οὐρανόθ]εν [π]εδ[ι]ονδε
 ζῆν' ὑπατον μῆστωρ' οὐδ' εἰ μάλα] πο[λ]λα κα[μοιτε]
 ἀλλ' ὅτε δὴ καὶ ἐγὼ προ]φ[ρ]ων] ἐβελ[ο]ι[μ]ι ἐρυσσ[αι]
 αὐτῇ κεν γαίῃ ἐρυ]σαιμ' αὐτῇ τ[ε] θα]λάσση·
 25 σείρην μὲν κεν ἐπ]εῖτα περὶ ρίον οὐλ[ύ]μπο[ιο]
 δῆσαιμην τὰ δὲ κ' ἀ]υτε μετῇ[ο]ρά πάντα γέ[νοιτο]
 τοσσον ἐγὼ περὶ τ' εἰ]μι θε[ω]ν [π]ερί τ' εἰμ' ἀνθρῶ[πων]·
 ὥς ἐφάθ' οἱ δ' ἀρα πάντες ἀκὴν ἐγενοντο] σιωπ[ῇ]
 μύθον ἀγασσάμενοι μάλα γὰρ κρατερῶς ἀγ]όρευ[σεν]

[The rest of the column,¹ containing lines 30-34, is broken away.]

Line 2. This line ends with a colon?

4. The line seems to end with a colon.
11. The accent of ἀρηγέμεν is visible. The dot after the line may be a period; or possibly an additional sign to indicate the erasure of Ν.
12. οὐλυμποιο is corrected to οὐλυμποιος.
17. The acute accent over the first ο of ὅσον is visible, as also that over the lost α of καρτιστος. — Is the mark over the first letter of ἀπαντων a trace of a rough breathing?
18. The acute accent of ἵνα is visible.
25. The accent of οὐλυμποιο seems to be visible.

¹ Possibly the last letter, with the high point following it, of the long line 32, now lost, is apparent below Column I. What in the plate seems to be a λ at the foot of the column is only a misplaced fibre of the papyrus.

COLUMN II

- 35 ἀλλ' ἡ τοι πολέμου [μεν ἀφεξομέθ' ὥς σὺ κέλευεις
 βούλην δ' ἀργεῖοι[ς ὑποθησομέθ' ἡ τις ὀνησεῖ
 ὥς μὴ παύτ[ε]ς [ὀλῶνται ὀδυσσαμένοιο τέοιο
 τὴν δ' ἐπιμειδ[ήσας προσεφθ] νεφέλληγερτα ζεύς
 40 θάρσει τρίτογέ[νεια φίλον τέκος οὐ νῦν τι θυμῷ
 προφρονὶ μὲνθ[ομαι] ἐθέλω δὲ τοι ἥπιος εἶναι
 ὥς εἰπὼν ὑπ' ὅ[χρεσφι] τίτυσκειτο χαλκοποδ' ἵππῳ
 ὠκυπέτα χρυσ[σησιν] ἐθιρησίην κομῶντε
 χρ[υσ]ον δ' αὐτο[ς] ἐδύνε περὶ χροὶ γέντο δ' ἱμασθλήν
 χρυσαί[η]ν ἐντυ[κτον] εὐο δ' ἐπεβήσετο δίφρου
 45 μασ[τίξε]ν δ' ἐλ[ααν] τῷ δ' οὐκ ἀέκοιτε πέτεσθην
 μέσσ[ηγυς] γαίης τε καὶ οὐρανοῦ ἀστεροέντος
 ἰδὴν δ['] ἱκανὲν πολυπίδακα, μήτερα θηρῶν
 γ[αργαρο]ν ἐνθ[α] δ[ε] οἱ τεμένεος βῶμος τε θυγαῖς
 ἐνθ['] ἱ[πποῦς] ἐ[στήσε] πατὴρ ἀνδρῶν τε θεῶν τε
 50 λυσσας ἐξ ὀχέ[ων] κατὰ δ' ἥρα πούλυν ἔχεν
 αὐτὸς δ' ἐν [κορυφήσιν] καθέζετο κυδαί γαίῳν
 ἐ[ἰσο]ρο[ω]ν τ[ρωῶν] τε πόλιν καὶ νῆας ἀχαιῶν
 οἱ δ['] ἀρα δειπνοῦν [ἐλοῖτο] κάρη κομῶντες ἀχαιοὶ
 ριμ[φα] κατὰ κλισί[α]ς ἀπο δ' αὐτοῦ θωρησσόντο
 55 τ[ρωες] [δ'] αὐθ' ἐτερώθεν ἀνα πτόλιν ὠπλιζόντο
 παν[ροτεροὶ] μέμασαν δὲ καὶ ὥς ὕμνῳ μαχεσθῆναι
 χρι[οὶ] ἀναγκαιῇ προ τ[ε] παιδῶν καὶ προ γυναικῶν
 58 π[ασαί] δ' [ὠϊγνυ]ντο π[ύλαι] ἐκ δ' ἐσσυτο λαὸς
 60 οἱ δ' ὅτε δὴ ρ['] ἐς χώρον [ἐνα] ξυνιόντες ἰκόντο
 σὺν [ν ρ' ἐβαλον] ρινούς σὺν [δ' ἐγχεα καὶ μὲν' ἀνδρῶν
 χαλκεο]θωρηκῶν ἀτα[ρ] ἀσπίδες ὀμφαλοεσσαι
 ἐπληντ['] ἀλλήλησι πο[λ]υς δ' ὀρμαγδὸς ὀρωρεῖν
 ἐνθα δ' [ἀ]μ' οἰμῳγῇ [τε καὶ] εὐχῶλῃ πέλεν ἀνδρῶν
 65 ὀλ[λ]υ[ν]τ[ων] τε καὶ ὀλ[λ]υμ[ε]ν[ων] ρεε δ' αἵματι γαῖα
 ὀφρ[α] μὲν ἥως ἡ[ν] [καὶ] ἀεζέτο ἱερὸν ἡμᾶρ
 τ[οφρα] [μαλ' ἀμφο]τέρων [βέλε' ἠπτετο] πίπτε δὲ λαὸς
 ἡ[μος] δ' ἡ[ελίος] μέσον ο[υρανὸν] ἀμφιβεβηκέν

Line 46. An apostrophe after μέσ of μέσσηγυς?

64. The accent of ἀμα is visible. The Bodleian fragment of *Iliad* Θ (Grenfell's *Greek Papyri chiefly Ptolemaic*, no. II) contains fragments of 64-67, as follows:

ἀνδ[ρῶν]
 γ[αῖα]
]ἡμᾶρ
 ἠπτε]το πείπτε δὲ λαός

The first of our columns begins with the first line of Θ. It may be that the roll contained only this book; so thick a piece of papyrus would soon make a bulky roll, and would hardly have been selected for copying a very considerable part of the *Iliad*. The juncture over which Column II is written would not preclude this at all, as the scribe is not likely to have been also the manufacturer of the papyrus, but doubtless bought his material in bulk, and cut off his rolls to suit the requirements of his copy. Θ in columns like these, with due allowance for margins, would make a roll 7 feet 9 inches in length. The Bankes papyrus of *Iliad* Ω, lacking the first 126 lines, makes a roll 7 feet 8 inches long, with 42 to 44 lines to the column; the roll, when complete, cannot have been over 9 feet in length; and this may be taken as indicating what was considered a convenient size for a roll of Homer.

The textual evidence of the fragment is interesting. Line 6¹ of the traditional text was evidently never in this copy. Bekker notes its absence from Codex Venetus A. Nauck, who, with F. A. Wolf, Cauer, and Pierron, prints the line unbracketed, nevertheless, with La Roche, cites A and D as omitting it; von Christ, retaining it, remarks, "om. AD, habet C et D in marg." Leaf and Rzach bracket the line, with La Roche and Hentze, while Van Leeuwen relegates it to the margin. As various editors have suggested, the line probably crept into the text of Θ under the shadow of line 5, with which it forms a couplet in T 101, 102.

The final -ν of *Δαναοῖσιν*, line 11, was written by our scribe, and then marked for erasure. The matter is a small one, but has received the attention of the editors. Bekker, Leaf, Cauer, Pierron, and Nauck retain the consonant; Wolf, La Roche, and Van Leeuwen reject it. It has been pointed out that Θ 11 = N 9.² In the latter place all texts, I believe, have *Δαναοῖσιν*. There the word concludes a sentence and a paragraph; and as

¹ δφρ' εἶπω τὰ με θυμὸς ἐνὶ στήθεσσι κελεύει. T 102 differs only in reading *στήθεσσι* *ἀνώγει*.

² Save that Θ 11 reads *ἀρηγόμεν* for the *ἀρηξέμεν* of N 9.

the following verse begins with a vowel, there is much to be said for the strong ending. In Θ 11, however, the conditions are altogether different. The word is followed by a comma only, and the first word of 12 begins with two consonants. The need of -ν is much less evident here than in N 9. The manuscript evidence, too, for the omission of -ν in Θ 11 is certainly strong. La Roche finds our reading attested by ACDEGL—for the last of which (L) Dr. Leaf has argued as being in some respects the best of our manuscripts after the Venetian Codex. The rejection of -ν by these manuscripts in Θ 11 is more notable when it is observed that practically the same group have *Δαναοῖσιν* in N 9. It may be noted that lines 11, 25, 26, and 18–40, which have been regarded with some suspicion by many critics, are not omitted from our text, the fragment, in its attestation of these lines, further ally-ing itself with the received text. An itacism, *χρη-* for *χρει-*, is to be observed in 57; probably also in 44, *χρυστην* for *χρυσειην*.

Line 59¹ seems to be lacking, though it must be said that the writing here is so faint and the papyrus so fragmentary that one should not be dogmatic. I think it certain that either 58 or 59 was never in this copy; and what few letters I have been able to recover seem to belong to 58. Of course, in point of sense, 59 can be dispensed with much better than 58, as 59 without 58 would be meaningless. The two lines appear as a couplet in B 809, 810, and perhaps the appearance of the second with the first in Θ in the received text is a parallel to the case of Θ 5, 6, discussed above; that is, 58 may have drawn 59 after it into the received text here, just as 5 seems to have brought 6 after it, above. It should be noted, too, that the second line of our couplet occurs in ω 70 without the first; which may show that its connection with the first is not as close as I have assumed; while quite as fairly suggesting that if the second can occur without the first, the first can occur without the second. I know of no other manuscript support for this rejection; and as far as my observation goes, the editors have not treated it.

¹ *πεῖροι θ' ἐππῆέν τε · πολὺς δ' ὀρυμαγδὸς ὀρώρειν.*

The fragment has at least added one to the early witnesses to the Homeric text, and among them it should have an honorable place. Of more than a score of papyri of parts of the *Iliad* which have been published,¹ one of the earliest is the

¹ A brief bibliography, especially of the first editions of these papyri, is added. For brevity, occasional lacunae in extended passages have not been noted.

A fragments (Brit. Mus. CXXIX). Collated in *Classical Texts from Greek Papyri in the British Museum* (1891), p. 80.

A 506 to B 877 (Bodleian). Discussed by Leaf, *Iliad*, vol. II, pp. xv-xvii.

A 44-60, Δ 82-92, Z 327-353, A 788 to M 11 (Geneva). Ed. Jules Nicole, *Revue de Philologie*, XVIII, 1894, pp. 103-114.

B 101 to Δ 40 (Brit. Mus. CXXVI recto). Collated in *Classical Texts*, etc., pp. 81-92.

B 730-828, 12 fragments. Collated by Grenfell and Hunt, *Oxyrhynchus Papyri*, I, pp. 46 ff.

B 745-764 (Haskell Oriental Museum, Chicago; no. 33). Ed. Grenfell and Hunt, *Oxyrhynchus Papyri*, I, pp. 47 ff.

Γ Δ fragments (Brit. Mus. CXXXVI). Collated in *Classical Texts*, etc., pp. 93-97.

Δ 109-113 (Brit. Mus. DCLXXXIX b); Θ 217-219, 249-253 (Brit. Mus. DCLXXXIX a); Φ 387-399, 607-611; X, 7 fragments, 40 lines; Ψ 159-166, 195-200, 224-229 (Bodl. MS. Gr. class. b. 3 (P)). Ed. Grenfell and Hunt, *Greek Papyri, Series II* (1897), pp. 4-13.

E Z fragments (Brit. Mus. CXXVII). Collated in *Classical Texts*, etc., pp. 98 f.

E. Nearly 300 lines, from a new papyrus, will be soon published in *Oxyrhynchus Papyri*, II.

Z 1-39, Σ 475-561 (Louvre). Ed. de Longpérier, *Notices et Extraits des Manuscrits de la Bibliothèque Impériale*, tome XVIII, pp. 114-123.

Θ 64-75, 96-116, M 178-198 (Bodl. MS. Gr. class. d. 20, e. 21 (P)). Ed. B. P. Grenfell, *Greek Papyri chiefly Ptolemaic* (1896), pp. 6-9.

A 502-537 (Gurob). Ed. J. P. Mahaffy, *Flinders Petrie Papyri*, part I, p. [13].

N 26-173 (Louvre). Osann, *Quaest. Hom.* II (1852); ed. de Presle, *Notices et Extraits*, tome XVIII, pp. 109-113.

N 2 to Ξ 522 (Brit. Mus. DCCXXXII). Ed. A. S. Hunt, *Journal of Philology* (1898), p. 25-59.

Σ 1-218, 311-617 (Harris papyrus, Brit. Mus. CVII). Ed. E. M. Thompson and G. F. Warner, *Catalogue of Ancient MSS.* (Greek), p. 1.

Ψ Ω fragments (Brit. Mus. CXXXVIII). Collated in *Classical Texts*, etc., pp. 100-108. Ed. F. G. Kenyon, *Journal of Philology* (1893), p. 296.

Ω 127-804 (Bankes papyrus, Brit. Mus. CXIV). Ed. G. C. Lewis, *Philological Museum*, I (Cambridge, 1831), pp. 177-187; *Catalogue of Ancient MSS.* (Greek), p. 7.

See also Van Leeuwen et Mendes Da Costa, *Ilias*, pp. xi-xv; Leaf, *Iliad*, vol. II, pp. xlii-xlvii; but above all, Häberlin's 'Griechische Papyri' (*Centralblatt für Bibliothekswesen*, XIV, 1897, pp. 201-211; also separately reprinted, Leipzig, 1897), whose list, with full biographies, notes all papyri published before 1897, and includes seven papyri not here catalogued (fragments of A, B, Δ, Θ, A, P).

Gurob fragment of Λ, coming from the third century B.C. The three third-century pieces, lately published by Grenfell and Hunt, containing parts of Δ, Θ, and Φ-Ψ, respectively, divide the honors with the Gurob fragment in point of antiquity. Just where to place the four Geneva papyri representing Α, Δ, Ζ, and ΑΜ, it is difficult to say. The last one seems to represent that ancient and remarkable type of text of the existence of which the Gurob fragment was our first intimation and for which the three Oxford papyri have just afforded the first considerable evidence. The British Museum papyrus containing ΨΩ, Kenyon ascribes to the first century B.C., but Thompson seems to think it much later. The Harris papyrus of Σ has been assigned by Thompson to the first century B.C. Silvestre would claim for the fragment of Ν in the Louvre an antiquity as great. The Louvre fragments of Ζ and Σ are probably later. The large papyrus of ΝΞ (Brit. Mus. DCCXXXII) has been assigned by its editor, Mr. Hunt, to the first century after Christ. Mr. Grenfell has assigned the Bodleian fragment of Θ to the first or second century. The Oxyrhynchus fragment of Β 745-764 is from the first or second century; and the twelve Oxyrhynchus pieces representing Β 730-828 are from the second. The Bankes papyrus, containing most of Ω, has been mentioned as belonging to the second century after Christ, and beside it I have ventured to place my fragment of Θ. The British Museum fragments of Β-Δ are assigned to the fourth century. There are also the British Museum papyri CXXVII, CXXXVI, of parts of ΕΖΣ, and ΓΔ, assigned to the third or fourth century; the Bodleian fragment of Μ, assigned by Grenfell to the fourth century; the fragment of Α known as British Museum CXXIX, of uncertain date; and the Hawara fragments of ΑΒ in the Bodleian Library, probably of the fifth century. In the papyri sixteen books of the *Iliad* are represented, the fragment before us being one of six papyrus witnesses for the text of Θ.

EDGAR JOHNSON GOODSPEED.

PAUSANIAS'S *DESCRIPTION OF GREECE*

THE *Description of Greece* by Pausanias must always, in spite of its inferior literary quality, be of surpassing interest to all who care for the relics of Greek civilization, for all, that is, who are interested in the history of the development of modern civilization, which owes so much to Greece. Without some knowledge of the external surroundings of men it is impossible to have a thorough knowledge of their lives, and Pausanias is our chief literary source for a knowledge of the external surroundings of the Greeks. To be sure, Pausanias lived and wrote in the times of the Antonines, long after the great days of Greece were past, but the monuments of earlier days still existed, and there were added to them the monuments of Macedonian and Roman times. At no time, perhaps, could a description of Greece have contained so much to interest later ages as in the second century after Christ. It is therefore natural that the attention of classical scholars should long have been turned with patient labor to the study of Pausanias.

Yet so long as Greece was difficult of access and the treasures hidden under her soil were unknown, it was impossible to know how accurate or how complete were the descriptions of her cities, temples, and monuments as given by Pausanias. His historical statements could be tested by comparison with those of other writers, and allusions to many of the monuments mentioned by him were also to be found in Greek and Latin literature, but a well-founded knowledge of his merits and demerits was unattainable. The annotated edition of Siebelis, published 1822-27, contains nearly all that could then be

offered in elucidation of his text, and how insufficient that was can be seen by a glance at the notes, which consist almost exclusively of citations from ancient writers.

With the German excavations at Olympia began a new era in the study of Pausanias, as in that of Greek art. The excavators proceeded with their Pausanias in hand as a guide, and they found his guidance for the most part trustworthy. But some things seemed not to be as he described them, and questions arose as to his trustworthiness, his wisdom, and his method of work. These questions have been discussed with great acumen by v. Wilamowitz, Kalkmann, Gurlitt, and others, with the result that a general agreement has been reached to the effect that however much Pausanias may have drawn upon earlier writers for historical and mythological statements, however much he may have refreshed his memory even in regard to what he describes by reference to earlier descriptions, he is to be accepted as a truthful and, in the main, accurate recorder of that which he himself saw. Meanwhile excavations at Athens, Eleusis, Epidauros, Pergamon, and numerous other sites have shed, directly and indirectly, new light upon the ancient Greece which Pausanias described, and the time has come when a thorough and comprehensive treatment of his work is possible and necessary. Such a treatment is a task of herculean magnitude, and classical scholars and all those interested in classical learning cannot be too thankful that it has been undertaken in different ways and in different countries by competent hands.¹

Only the first volume of the edition by Professor Hitzig and Professor Blümner has appeared, but it is enough to cause

¹ *Des Pausanias Beschreibung von Griechenland mit kritischem Apparat*, herausgegeben von Hermann Hitzig, mit erklärenden Anmerkungen versehen von Hermann Hitzig und Hugo Blümner. Erster Halbband. Mit zehn topographischen und einer Münztafel. Buch I: Attika. Berlin, 1896. Verlag von S. Calvary & Co. (Also with Latin title.)

Pausanias's Description of Greece, translated with a Commentary by J. G. Frazer, M.A., LL.D., Glasgow; Fellow of Trinity College, Cambridge; of the Middle Temple, Barrister-at-Law. In six volumes. London, Macmillan & Co., Limited; New York, The Macmillan Company. 1898. Price \$30.00.

great satisfaction and to make the forthcoming volumes eagerly awaited.

More than forty years have passed since the appearance of Schubart's edition, and during that time countless emendations of the text have been proposed, sometimes supported by inscriptions. All this material had to be utilized, and in addition a number of manuscripts insufficiently utilized by Schubart and Walz were to be newly collated or examined. That much of the *apparatus criticus* is taken over unchanged from Schubart and Walz is only natural. The examination of the manuscripts leads Professor Hitzig to the conclusion that the text of Pausanias is in bad condition, that although the manuscripts vary in value they are all derived from one archetype, that the archetype itself contained corrections and various readings, and that therefore the procedure of the editor must be eclectic, while a wide field is left for conjectural criticism and emendation. In view of these facts, the critical apparatus gives the readings of the better manuscripts even when they are not real variants. This undoubtedly causes the insertion of some useless matter which can but confuse the student; nevertheless it is the better course to pursue when there is danger of giving too little if one is too careful not to give too much. The same fear of offering too little has led to the insertion in the critical notes of occasional "emendations" which might as well have been left to merited oblivion. But, after all, the critical notes are careful and, on the whole, wise, and the text is open to little criticism.

The notes of this edition consist for the most part of brief statements of the views of various writers on disputed points, of references to ancient authors, and occasional direct explanations of the text, as when *Αἰθυῖας Ἀθηναῖς*, chap. 41, 6 has the note: "Athena die Taucherin, ein Beiname, den sie trägt als Beschützerin der Seefahrten," or chap. 29, 3 has a note on the genitive of the superlative where the comparative might seem more natural. It is an exception when the editors express their own opinion on a disputed point of topography or archae-

ology, but the concise statement of the views of other writers gives the reader an opportunity to form his own judgment. The value of these notes, giving clearly and without argument for the most part the conflicting views of various authorities, with references to nearly all the "literature" of each subject, can be estimated only by those who have been forced to do for themselves as occasion demanded some part of the work performed by the editors.

Dr. Frazer's work is different in character from that of Hitzig and Blümner. Whereas they furnish the Greek text with critical apparatus, an introduction relating to the manuscripts, and notes giving references to the ancient and modern literature pertaining to Pausanias, with brief summaries of conflicting views of modern scholars, Dr. Frazer gives us a good and idiomatic English translation, preceded by a masterly introduction on the date of Pausanias, his literary style, his trustworthiness, the poets, historians, and other writers whose works he used, his tastes, and his religious beliefs, and followed by four volumes of learned, elaborate, and exhaustive notes and a volume of indices and maps. The Swiss editors give the student of Pausanias who reads Greek the material needed for the further prosecution of his studies. Dr. Frazer gives to all who can read English nearly all possible information concerning Pausanias, the places and monuments he describes, and the monuments he might have described had he tried to describe everything in Greece of which any notice has come down to us.

As Dr. Frazer does not publish a Greek text, he is under no obligation to furnish us a critical apparatus, and he offers no new collation of manuscripts. At the end of the translation there are, however, fifty-two pages of critical notes, mentioning and sometimes discussing such proposed emendations as seem to be of importance. The translation itself is excellent, the chief fault to be found with it being that it is too good. Dr. Frazer himself says of the literary style of Pausanias, "It is a loose, clumsy, ill-jointed, ill-compacted, rickety, ramshackle style, without ease or grace or elegance of any sort." Now it

would be a pity indeed to try to render the Greek of Pausanias into English which should answer to such a description, and yet it is also a pity that the clear, incisive, and elegant style of Dr. Frazer occasionally lends to the tame and colorless expressions of Pausanias a vigor and emphasis which to some degree change the meaning, while the laudable desire for variety in expression leads to an occasional slight lack of accuracy. These defects are, however, but as spots on the sun, so slight are they in comparison with the general excellence of the translation.

But it is in the notes that the most valuable part of Dr. Frazer's work is found. In his preface he modestly confesses "to being an expert in none of the branches of archaeology." His notes show that he is a widely read and thoroughly competent scholar in all. Here is a veritable mine of information on all subjects connected with Greek antiquities. Not only are the topographical remarks of Pausanias elucidated and discussed, but equal care is devoted to those points of topography which Pausanias fails to mention. So, for instance, Mt. Aegaleus, which Pausanias omits in his enumeration of the Attic mountains, is described, with reference to the historical events in which it played a part, in a note or essay of nearly three pages (vol. II, pp. 428-431), while nearly two pages are devoted to the lower course of the river Ladon which Pausanias does not describe (vol. IV, pp. 288 f.). So, too, buildings not mentioned by Pausanias but known to us by excavations or from other sources are described, as, for instance, those discovered at Epidaurus (vol. III, pp. 238 f.), while smaller works, statuary, bronzes, terra-cottas, and the like, are constantly referred to, though Pausanias may have passed them by unnoticed. That proper names and legends, even when they lead to no remark by Pausanias, are the subjects of numerous interesting notes on the primitive worship of the Greeks and other peoples, is a matter of course with the author of *The Golden Bough*.

Where so much is given us it would be invidious to search

the pages of this great work for possible opportunities for carping criticism. It is better to select a few important or interesting questions and see how Dr. Frazer treats them, for he has considered it his duty to express an opinion on nearly all the questions concerning which there is any disagreement among scholars. A few remarks in criticism of details may then be added.

The theatre of Dionysus at Athens is described in vol. II, pp. 222-227, with no hint of a knowledge of Professor Dörpfeld's theories relating to the Greek stage, theories which were but beginning to attract attention at the time when this part of the commentary was written. At the end of the description of the theatre at Epidaurus (vol. III, p. 254) the theory that the Greek actors acted, not on a raised stage, but on the level of the orchestra, is briefly dismissed as contradicting (1) the testimony of Vitruvius, of Pollux, and of other ancient writers who speak of actors ascending and descending; (2) the evidence of Greek vases; (3) the evidence of existing Greek theatres; (4) the evidence of the Delian inscription in which the stage-building is called the *λογεῖον* (but Dr. Frazer fails to notice that this reading is due to the editor of the inscription); (5) the rules of probability. In vol. V, pp. 501-506, among the addenda, corrections and additions to the description of the theatre of Dionysus are introduced, based on the book *Das Griechische Theater* by Dörpfeld and Reisch. The question of the stage is, however, not discussed except as regards one or two minor points. The brief discussion in vol. III is supplemented in vol. V, pp. 582-584, and Dörpfeld's views are dismissed as improbable. Dr. Frazer, then, apparently holds to the traditional view that the description of the Greek theatre given by Vitruvius is a correct description of the theatre of the fifth century B.C.

Now we cannot demand of a commentator on Pausanias an exhaustive treatment of all questions relating to the Greek theatre. Perhaps Dr. Frazer does his whole duty in stating that he does not accept Professor Dörpfeld's views and in giv-

ing some reasons for his dissent. But Dr. Frazer habitually does so much more than his duty that it is somewhat disappointing to find this interesting subject incompletely treated. Professor Dörpfeld's theories have been far from meeting with universal acceptance; it may in fact be doubted whether any competent judge accepts them *in toto* as stated in *Das Griechische Theater*, yet one thing he seems to have established (if it needed to be established), namely, that the Greek theatre of Vitruvius is not the Greek theatre as it existed four centuries or more before Vitruvius's day. It is not enough to say that Dörpfeld's theories are untenable and that therefore the description of Vitruvius is to be accepted for the fifth century B.C. Dörpfeld has already, since the appearance of Dr. Frazer's *Pausanias*, modified his theories so far as to argue (*Athen. Mith.* XXII, 1897, pp. 439-462) that Vitruvius was right in stating that in the Greek theatre the actors performed upon a high stage, but that the Greek theatre meant by Vitruvius was the type of theatre prevalent in the Greek cities of Asia Minor in Vitruvius's own time. That the Asia Minor type does not differ essentially from the usual Hellenistic type has now been shown by E. Bethe (*Hermes*, XXXIII, pp. 313-323). The belief that the description of Vitruvius is correct if regarded as a description of the Greek theatre of his own day does not commit any one to the belief that the actors of the fifth century B.C. performed on a high, narrow stage. Dr. Frazer does not seem to appreciate the lapse of time between Aristophanes and Vitruvius, and yet most of those who have recently devoted themselves especially to the study of the Greek stage have agreed in one thing if in nothing else,—that the theatre of the fifth century B.C. was not like that for the construction of which Vitruvius gives directions.

In regard to the ancient temple on the Acropolis at Athens, which Professor Dörpfeld believes was restored after the departure of the Persians in 479 B.C., Dr. Frazer maintains his previous opinion and reprints with some few changes his article in the *Journal of Hellenic Studies*, XIII, pp. 153-187, in which he

argues that the temple was not restored after the Persian war, and consequently did not exist in the time of Pausanias. In an addendum (vol. V, pp. 542 f.), Dr. Frazer inclines to the belief that the Athena of the Parthenon, and therefore of the pre-Persian temple, was called Polias, and that therefore Professor Dörpfeld's theory ('Der Alte Athena-tempel auf der Akropolis,' *Athen. Mitth.* XXII, 1897, pp. 159-178) that the temple of Athena Polias described by Pausanias was the pre-Persian temple is possible if it were proved that the temple had been restored after the departure of the Persians and continued to exist throughout antiquity. But this Dr. Frazer thinks has not been done. Professor Dörpfeld writes plausibly, nay almost convincingly, in his last article on this subject, but although he has shifted his ground to some extent, he brings forward no new argument to prove that the temple existed in the time of Pausanias. That Dr. Frazer has not been led to desert his previous position is a proof of his independence and soundness of judgment, although I am not prepared to agree that the old temple was not temporarily restored after the Persian war. Some further arguments against Professor Dörpfeld's views may now be found in an article by Chr. Belger, *Berl. Phil. Wochenschrift*, November 6 and 13, 1897.

Although Dr. Frazer disagrees with Professor Dörpfeld in his views concerning the theatre and the pre-Persian temple, he shows him in many parts of his work the respect that is his due, and accepts without question many of the results of his investigations. In general it may be said that Dr. Frazer has failed to notice no important contribution to our knowledge of Greek antiquities, and his notes are brought by the addenda in vol. V to a period surprisingly near his date of publication. So the inscription relating to the building of the temple of Athena Nike, found in the summer of 1897, is mentioned (vol. V, p. 507) with reference to *Athen. Mitth.* XXII, 1897, pp. 226 f., although the text was not published until too late to be utilized. (See now 'Εφ. 'Αρχ. 1897, pp. 173-194, pl. 11.) So, too, the discussion of the Athena Lemnia of Phidias is continued by a

summary of Jamot's treatise in *Monuments Grecs*, vol. II, nos. 21-22, 1893-94, pp. 23-35, and reference to other articles on the subject, including Professor Furtwängler's article in the Munich *Sitzungsberichte*, 1897, pp. 289-292, in which he connects with the Athena Lemnia a relief from Epidaurus now in the museum at Athens. Dr. Frazer agrees with Mr. Jamot in regarding Professor Furtwängler's Athena Lemnia as a hybrid, and fails "to understand how a glaring discord between the head and body of a statue can be thought a characteristic beauty, above all in a statue which ancient critics regarded as the most beautiful work of their greatest master." It may be worth while to add that Professor E. Reisch has recently given reasons for connecting the Epidaurus relief, not with the Athena Lemnia, but with the Athena Hephæstia of Alcámenes (*Jahreshefte des österreichischen archäologischen Institutes*, vol. I, pp. 79-87). Before leaving the subject of Dr. Frazer's addenda it is well to state that his notes and addenda on Delphi give the most satisfactory account of the French discoveries at that place accessible.

Very rarely Dr. Frazer makes an unguarded statement. So in vol. III, p. 508, in speaking of the arrangement of the figures in the eastern pediment of the temple of Zeus at Olympia, he says "here, as elsewhere (*e.g.* V, 13, 1) Pausanias uses the terms 'right' and 'left' in the sense of the spectator's right and left." Now this is, I believe, not strictly accurate. In V, 13, 1, Pausanias is speaking of the temple, or rather of its entrance, a thing which has no natural right or left, and naturally therefore he means the spectator's right; but when he speaks of a statue or other object which has a natural right and left it would be strange if he used the words with reference to the right and left of the spectator. The only case, so far as I know, in which there appears to be any ground for the belief that Pausanias used the words "right" and "left" referring respectively to the left and right sides of a statue is in X, 37, 1, the description of an Artemis at Anticyra, and the only reason for the belief in this case is a coin on which the figure is

reversed. I derive this information from an article by Dr. Wernicke (*Jahrb. d. Arch. Inst.* 1897, pp. 169-194) which had not appeared when Dr. Frazer wrote his note, and if Dr. Frazer's statement is inaccurate no blame attaches to him except that for making a general statement without having himself looked up the facts. If the statement is correct, it would be interesting to see the facts upon which it is based if there are any beyond those adduced by Professor Michaelis (*Arch. Zeitung*, 1876, pp. 162 ff.). In vol. III, p. 345, Dr. Frazer, speaking of the temple of Athena Chalcioecus, says that it was probably "merely lined with bronze plates, like the so-called Treasury of Atreus at Mycenae," but on p. 126 it is expressly (and rightly) stated that the so-called Treasury was not so lined, but merely adorned with bronze rosettes or the like.

Misprints are almost entirely absent from Dr. Frazer's work. My attention has been called to one in vol. II, p. 158. The red-figured Theseus vase mentioned is from *Ruvo*, not *Truvo*.

Of all the important books on classical subjects published in recent years this annotated translation of Pausanias is perhaps the most important. To the young student it may take the place of a library, and no scholar is so learned that he cannot derive from it both useful suggestions and valuable information. The work is a wonderful achievement, a mighty monument of industry and learning, and a great boon to all who are interested in ancient Greece and its remains.

HAROLD N. FOWLER.

CLEVELAND, OHIO,
May, 1898.

THE ARTEMIS BRAURONIA OF PRAXITELES

PAUSANIAS, in his description of the Acropolis, tells us (I, 23, 7): καὶ Ἀρτέμιδος ἱερόν ἐστι Βραυρονίας. Πραξιτέλους μὲν τέχνη τὸ ἄγαλμα, τῇ θεῷ δέ ἐστιν ἀπὸ Βραυρώνος δήμου τὸ ὄνομα· καὶ τὸ ἀρχαῖον ξόανόν ἐστιν ἐν Βραυρώνι, Ἀρτεμις ὡς λέγουσιν ἡ Ταυρικὴ.

The inscriptions that refer to the images of the goddess which stood in this sanctuary have been collected by Köhler in *C.I.A.* II, 754-758, and have been discussed by O. Jahn in *Mem. dell. Inst.* II, pp. 23 ff.; Michaelis, in *Parthenon*, pp. 310 ff.; Studniczka, in *Vermut. z. Kunstgesch.* pp. 18 ff.; and Robert, in *Archäol. Märchen*, pp. 144 ff.

They are, in accordance with Studniczka's arrangement and text, the following:

Ol. 108, 2. Νικολέα· χιτῶνα ἀμόργινον περὶ τῷ ἔδει.

Ol. 108, 3. Μνησιστράτη Ξενοφίλου· ἱμάτιον λευκὸν παραλουργές· τοῦτο τὸ λίθινον ἔδος ἀμπέχεται.

Ol. 108, 4. ἀμπέχονον, Ἀρτέμιδος ἱερόν ἐπιγέγραπται, περὶ τῷ ἔδει τῷ ἀρχαίῳ, Θεανώ· ἀμπέχονον, περὶ τῷ ἔδει τῷ ἀρχαίῳ, Πεν-τετηρίς. ταραντῖνον, περὶ τῷ ἔδει τῷ ἀρχαίῳ, Θεανώ. κατὰστι-κτον διπτέρυγον, περὶ τῷ ἔδει τῷ ἀρχαίῳ . . . χιτωνίσκος κτενωτὸς περιποίκιλος, περὶ τῷ ἀγάλματι τῷ ὀρθῷ.

Ol. 111, 1. μ]άχη κροκωτὸν διπλοῦν ποικίλην τὴν π[εξίδα ἔχοντα τὸ ἄγαλ]μα τὸ ὀρθὸν ἔχει.

After *Ol. 111, 3*, κάνδυν, τὸ ἄγαλμα ἔχει, Μόσχου θυγάτηρ Λεωσθένους γυνὴ ἀνέθηκεν Λυσιμάχῃ· κάλυμμα, κάνδυν, τὸ ἄγαλμα ἔχει, Φίλη Δημοχαρίνου γυνὴ· ἱμάτιον λευκὸν περὶ τῷ ἀγάλματι, ῥάκος. ἐνκυκλον λευκὸν ἀνετίγραφον περὶ τῷ ἀγάλματι τῷ ἔσθη-κότι . . . ταῦτα Νικομάχῃ ἀνέθηκε.

These inscriptions form a list of offerings made by the women of Athens to the virgin goddess. They are interesting to us for the reason that two images of the deity are clearly distinguished. In the inscription for Ol. 108, 4, offerings for the *ἔδει τῷ ἀρχαίῳ* are followed by one for the *ἀγάλματι τῷ ὀρθῷ*. In the record for Ol. 111, 1, there is mention of *τὸ ἄγαλμα τὸ ὀρθόν*, and a little later of *τῷ ἀγάλματι τῷ ἐστηκότι*. From the use of *ἄγαλμα ὀρθόν* in Pausanias alone, we may assume that the *ἄγαλμα ὀρθόν* and the *ἄγαλμα ἐστηκός* refer to the same image, and this is the view taken by all the commentators mentioned above.

Studniczka maintains that the *τῷ ἔδει* of Ol. 108, 2, and the *τὸ λίθινον ἔδος* of Ol. 108, 3, refer to different images. Since *τῷ ἔδει* in Ol. 108, 2, is without descriptive modifier, and since the two images in Ol. 108, 4, are easily distinguishable from each other in the inscriptions, he maintains that the new image must have been placed in the sanctuary between Ol. 108, 2, and Ol. 108, 3. Furthermore, inasmuch as in the inscriptions after Ol. 111, 1, *ἄγαλμα* is the only word found referring to the images, and inasmuch as in the last five lines of the inscriptions copied above we find *τὸ ἄγαλμα, περὶ τῷ ἀγάλματι τῷ ἐστηκότι*, and again *περὶ τῷ ἀγάλματι*, we must assume that *ἀγάλματι* and *ἀγάλματι τῷ ἐστηκότι* — standing perhaps in the lines of the stone wherein are recorded the offerings of one woman made on one occasion — refer to the older and younger image respectively.

Hence Studniczka declares that the older statue is referred to as *τὸ ἔδος, τὸ ἔδος τὸ ἀρχαῖον*, and *τὸ ἄγαλμα*; and the younger image is mentioned by the names *τὸ ἔδος τὸ λίθινον, τὸ ἄγαλμα τὸ ὀρθόν*, and *τὸ ἄγαλμα τὸ ἐστηκός*.

Robert argues against this arrangement. He affirms, first, that in the last lines of the inscription *ἄγαλμα* and *ἄγαλμα ἐστηκός*, if they are assumed to refer to different images, furnish an example of very inexact terminology. In such a case we should expect *τὸ ἀρχαῖον* to be added to the simple *ἄγαλμα* in an official inscription for the sake of clearness. Then he urges that *τὸ ἔδος* is the real consecrated cultus image, while

ἄγαλμα may refer to any image of a god; that is to say, any ἔδος is an ἄγαλμα, but not every ἄγαλμα is a ἔδος. Then he seeks, by altering the division of the inscriptions into sentences, to show that τὸ ἄγαλμα and τὸ ἄγαλμα τὸ ἐστηκεν in the last lines of the inscriptions refer to offerings by different women, made on different occasions, with perhaps a considerable interval of time between them, and infers, accordingly, that these two expressions refer to the same image, *i.e.* to the later standing image. He would also have us believe that τῷ ἔδει of Ol. 108, 2, and τὸ λίθινον ἔδος of Ol. 108, 3, must both refer to the ancient image; that is, the older image is meant when either τὸ ἔδος, τὸ ἔδος τὸ ἀρχαῖον, or τὸ ἔδος τὸ λίθινον is used,—the later statue only being known as τὸ ἄγαλμα, τὸ ἄγαλμα τὸ ὀρθόν, and τὸ ἄγαλμα τὸ ἐστηκεν. This seems at first glance a beautifully clear use of words. But it seems to me that Professor Robert here makes three unwarranted assumptions: first, that the later statue was not a cultus image, and so could not logically be called ἔδος; secondly, that the ancient image could not be called an ἄγαλμα, and therefore is not mentioned in the inscriptions after Ol. 108, 4; and therefore, again, the Athenian women, after that date, brought all their gifts, not to the cultus image of the goddess, but to an ἄγαλμα, itself a mere offering; thirdly, that ἔδος and ἄγαλμα, at the time of these inscriptions, each held its original root meaning, and that therefore the stone-cutter, or his "copy," could use them as synonymous.

Pausanias, in the passage cited at the beginning of this paper, informs us that the ἄγαλμα, *i.e.* the later image, was the work of Praxiteles. He not only uses this word elsewhere, however, of statues dedicated to the gods, but it is also his constant term for the cultus image of a temple: cf. I, 24, 5 (the Parthenos); 26, 7 (the Polias); II, 2, 7; 3, 5, etc., etc. When in fact he does use ἔδη, in VIII, 46, 2, it is apparently because he has just used, in the same sentence, ἀναθήματα in the sense of votive offerings. So Pausanias's general usage makes clear that he may be, and probably is, referring to the cultus image in his mention of this ἄγαλμα made by Praxiteles. Again,

Pausanias's constant use of *ἄγαλμα*, when referring to ancient as well as to later images, proves that in his time it was not customary to use *ἔδος* of cultus images, but that *ἄγαλμα* was so used.

In *Timaeus*, p. 93, we find *ἔδος· τὸ ἄγαλμα καὶ ὁ τόπος ἐν ᾧ ἱδρύται*. In Suidas, *v. ἔδος*, this definition is repeated. Isocrates, *Or.* 15, 2, *Φειδίαν τὸν τὸ Ἀθηνᾶς ἔδος ἐργασάμενον*, refers to the Athena Parthenos as a *ἔδος*. Plutarch, *Pericles*, 13, writes *ὁ δὲ Φειδίας εἰργάζετο μὲν τῆς θεοῦ τὸ χρυσοῦν ἔδος*, mentioning the same statue. Xenophon, *Hell.* I, 4, 12 (*πλυντήρια ἤγεν ἡ πόλις, τοῦ ἔδους κατακεκαλυμμένον τῆς Ἀθηνᾶς*), is writing of the *xoanon* of Athena in the Erechtheum as a *ἔδος*. But we also have *ἄγαλμα* used of the image of a god, sometimes of a temple cultus image, sometimes of any image of a deity, in Pindar, *N.* 5, 1; Aeschylus, *Sept.* 258, *Eumen.* 55; Herod. I, 131 and II, 42, 46; Sophocles, *Oed. Rex*, 1379; Plato, *Phaedr.* 251 A; Lysurg. 1 and 143 (*ἔδη*).

To quote from inscriptions, however, which are more to our purpose, in *C.I.A.* II, 660₅₃, *ἔδος* is used of the gold and ivory Parthenos. But in *C.I.A.* III, 70 A (*Add.* p. 484), *ἔδος* seems to refer to a new image of the goddess. In *C.I.A.* II, 652₄₁, *ἀγάλματος* refers, like *ἔδος* of *C.I.A.* II, 660₅₃, to the Athena Parthenos. This list, which shows the use of *ἄγαλμα* and *ἔδος* as synonyms, could easily be extended. But enough, I think, has been said to warrant the statement that, though *ἔδος* may in the beginning have been used of specially consecrated images, and may, indeed, have never lost this force, and though *ἄγαλμα* may originally have meant any gift pleasing to the gods, still the evidence shows that, from the time of Aeschylus to that of Pausanias, these two words were used as synonyms. In fact, *ἄγαλμα* came to be the customary designation even for a sacred cultus image.

In the inscriptions cited above, we may, therefore, readily accept the view that *ἔδος* and *ἄγαλμα* were used interchangeably with reference to the two images of Artemis Brauronia. And Robert's claim, that this could not have been the usage because

he knows of no case where two images of a deity in one temple are both called ἔδη, cannot stand against this testimony. We are, therefore, apparently warranted in believing that τὸ λίθινον ἔδος of Ol. 108, 3, has the adjective added to distinguish this later image from the older τῷ ἔδει of Ol. 108, 2; and that τῷ ἀγάλματι and τῷ ἀγάλματι τῷ ἐστηκότι, towards the end of our citations, also refer to two images, and that, after Ol. 111, 3, ἄγαλμα, unmodified, refers to the ancient image. We learn, too, that the later was a standing stone image, and we infer that the earlier was a seated and, probably, a wooden image.

But Robert (pp. 156 f.), after stating, in accordance with his interpretation of the inscriptions, that the younger was most probably a standing gold and ivory statue, seeks to ascribe this to "the elder Praxiteles," the contemporary of Pheidias, to whom he believes Pausanias, in I, 23, 7, refers. And he undertakes to prove that the figure of Artemis on a fragment of a vase found on the Acropolis, published by Kekulé in *Ath. Mitt.* (V, p. 256, and Taf. 10), is a copy of this particular gold and ivory statue. This vase was gilded inside and out, and plainly was made to imitate a massive gold plate ornamented with reliefs. The nude portions of the figure of the goddess and some other details of the vase were colored white, and probably certain other details were added in color. So the appearance of the goddess must have been quite similar to that of a gold and ivory statue. Even the reproduction on Kekulé's plate shows us that the picture of the goddess in its delicate archaic refinement is quite similar in character to representations of the goddess on red-figured vases of the "severe" style. The inscription on the vase dates its manufacture at about 480 B.C.

To find a parallel in sculpture for this goddess, with her long straight nose with dilated nostrils, full projecting lips, strong pointed chin, lean muscular neck and arms, long fingers, delicate rendering of the inner garment as seen at the right elbow, we must turn to such figures as the so-called "Wagenbesteigende Frau" (Brunn-Bruckmann, 21), the relief of Athena approached by worshippers (*ibid.* 17), the familiar relief show-

ing the archaic head of a discus-thrower from the Acropolis — all works of the pre-Persian period, and by no means belonging to the end of that period. Of course, no one would maintain that the vase-painter would copy the style of a statue with close fidelity; but if, as Robert maintains, not only was this vase dedicated to Artemis Brauronia, but the Artemis upon it is a copy of a cultus image made by “the elder Praxiteles,” we should certainly expect some distant glimmer of his style to appear on the vase. That an image like this on the vase fragment could hardly have been made by an artist who was contemporary with Critius, Myron, Calamis, and Pheidias is, in view of what we know of some of the works of these masters, very improbable, not to say impossible. Therefore we must come to the conclusion reached by Kekulé, — that the vase was a gilded clay imitation of a massive gold plate, — and may assume that this very imitation probably suggested to the vase-painter the treatment of his figure in the manner of a gold and ivory statue. Inscriptions and vase-painting alike point away from “the elder Praxiteles” as the artist of the younger image of Artemis Brauronia. The $\tau\hat{\omega}$ $\epsilon\delta\epsilon\iota$ of the inscription of Ol. 108, 2, and the $\tau\hat{o}$ $\lambda\acute{\iota}\theta\iota\nu\omicron\nu$ $\epsilon\delta\omicron\varsigma$ of Ol. 108, 3, as demonstrated above, tend to show that the younger statue was dedicated between these two dates, *i.e.* about 346 B.C. If our reasoning is correct, this image was made by the famous Praxiteles, and was a marble image.

JOHN PICKARD.

American School
of Classical Studies
in Rome

SOME NEW INSCRIPTIONS FROM PUTEOLI, BAIÆ,
MISENUM, AND CUMÆ

THE following inscriptions (nos. 1-67) include both those, the originals of which Signore Giuseppe de Criscio — the antiquarian of Pozzuoli, who has furnished a considerable number of inscriptions to Mommsen, the editor of Vol. X of the *Corpus Inscriptionum Latinarum* (cf. *C.I.L.* X, p. 189, xxxvii) — has in his possession (nos. 1, 3, 5-10, 14-18, 20, 23, 25-30, 35, 37, 39-42, 44-48, 50, 51, 56, 60, 65-67); and those, the originals of which de Criscio has either merely seen or once possessed (nos. 2, 4, 11-13, 19, 21, 22, 24, 31-34, 36, 38, 43, 49, 52-55, 57-59, 61-64). The former I have copied carefully both from the stones themselves and from squeezes in my possession. In the case of the latter, I have given the copies just as de Criscio gave them to me.¹

Unless otherwise stated, the first measurement of the stone is of the width, the second of the height.

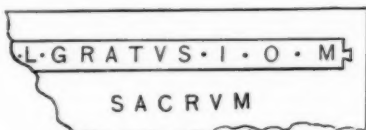
The *Via Domiziana*, on which several inscriptions were found, is the road that connects Pozzuoli and Cumæ. The *Via Campana* is farther to the east, running from Pozzuoli out into the country, north of the famous amphitheatre. The *Via Solfatara* is the street that connects the city with the well-

¹ Since preparing the report of these inscriptions, I find that nos. 17, 26, and 41 have already been published by L. Corra in *Not. d. Scavi*, Ottobre, 1897, pp. 424, 425, but in part incorrectly or imperfectly. In no. 17, l. 3, Sign. Corra reads carelessly BOVIAL · Q · L · SALVIAE. Inscription no. 26, he reports as being scratched 'sul collo di un' anfora.' In the transcription of no. 41, no apices are given, i.e. in *infra*, *hortulô*, *ustrinô*. L at the end of the first line is given as if it could all be read, and the break were some distance from it.

known Solfatara. See Baedeker, *Southern Italy* (ed. 1893), maps between pp. 92-93; and tab. iii at the end of Vol. X² of the *Corpus*.

PUTEOLI

1. Fragment of marble tablet (41 × 21 cm.), unbroken on the top and the right side, found at *Pozzuoli*, south of the amphitheatre, in 1893.



... l(ibertus) Gratus I(ovi) O(ptimo) M(aximo)
Sacrum.

The letters are well shaped, and are about $4\frac{1}{4}$ cm. high. The surface on which the first line is written is slightly depressed (about $\frac{1}{4}$ cm.) below that of the rest of the tablet. The lower plane, however, is as smooth as the upper one, and shows no trace of another inscription erased to make room for this, although the depression was due probably to a mistake made in the beginning.

2. Marble tablet found at *Pozzuoli*; copied by de Criscio.

ex | IVSSVIOM HELIOPOLITAN | i
aede | M DILAPSAM, M VLPivs SABINVS AEDITVS·M

[ex] iussu I(ovis) O(ptimi) M(aximi) Heliopolitan[i]
[aede] m dilapsam M. Ulpius Sabinus aeditus m(agister)

The form *aeditus* occurs rarely (so in *C.I.L.* X, 6638, C 2, 28). *Aedituus* is the common form. For *Aed(ituus) Mag(ister)*, see also *C.I.L.* VI, 2212, and cf. De Ruggiero, *Diz. Epigr.* p. 272 c. *Iupiter Optimus Maximus Heliopolitanus* had a special cult at Puteoli; cf. *C.I.L.* X, 1579, 1634; and Preller, *Röm. Myth.* II³, pp. 402 ff.

3. Marble slab (26×50 cm.), found at *Pozzuoli, Via Campana*, in 1892.

D | S

P E N A T I B V S

S A C R V A

Dis | Penatibus | Sacrum.

Height of letters, in first and third lines, about $4\frac{1}{2}$ cm., in second line nearly 4 cm.

4. Marble tablet, found at *Pozzuoli*, in 1893; copied by de Criscio.

D • M

Q • A N T I S T I O

D O M I T O

V I X • A N • X I I I • M • X I

Q • A N T I S T I V S

D O M I T V S

E T • L V T A T I A

E V D I A

P A R E N T E S

F I L I O

C A R I S S I M O

F E C E R V N T

d. m. | Q. Antistio | Domito | vix(it) an(nis) XIII, m(ensibus) XI, | Q. Antistius | Domitus | et Lutatia | Eudia | parentes | filio | carissimo | fecerunt.

I have not found the cognomen *Eudia* elsewhere, but *Euodia* occurs often, as *C.I.L. X, 7700*.

5. Marble tablet (57×19 cm.), found at *Pozzuoli, Via Campana*, in 1895.

M • A N ^T • M • F • C R E S C E N S

V I X S • A N • X I I I

M. Ant(onium), M(arci) f(ilius), Crescens,
vixs(it) an(nis) XIII.

Height of letters, first line, 3 cm.; second, $2\frac{1}{2}$ cm.

6. Marble slab (48 × 29 cm.), corroded, found at *Pozzuoli*, *Via Campana*, in 1896.

C · A T T I V S · C · F · P A L
P R I N C E P S · V I X
A N N · X X V I

C. Attius, G(aii) f(ilius), Pal(atinae tribu), | Princeps, vix(it) |
ann(is) XXVI.

The letters are of a good period; height, first line $3\frac{1}{2}$ cm., other lines, about 3 cm.

7. Terra-cotta ash-urn, found at *Pozzuoli*, *Via Domiziana* in 1896.

M · A V L I · S E C V N D I
I D I B V S · D E C E M B R ·
C N · D O M I T I O · C O S ·

M. Auli Secundi | idibus Decembr(ibus) | Cn. Domitio cos. A.D. 32?

The urn is of cylindrical shape, slightly bulging at the bottom; height 26 cm., and circumference 95 cm. The inscription is painted around on the outside with a pigment, which now is of a light pinkish color. The letters, which are about 2 cm. high, suggest a cursive style. The *i* in *Secundi* is very much like a cursive *s*. For a similarly dated urn, found at Pozzuoli, near the *Via Campana*, cf. *Not. d. Scavi*, 1892, p. 479. To judge from the forms of the letters, the inscription can hardly be dated earlier than 32 A.D., the year of the consulship of M. Furius Camillus and of Cn. Domitius Ahenobarbus, who became by Agrippina, daughter of Germanicus, the father of the emperor Nero. In comparison with this inscription, the painted inscription on the other ash-urn (no. 30) seems to me earlier.

8. Marble tablet (30 × 34 cm.), found at *Pozzuoli*, on the *Via Campana*, in 1897.

D · M ·

AVRELI AEMARCIA NÆ
 INCONPARABILI FEMI
 NÆ · QVÆ · VIXIT · ANNIS
 XXV · ET · MENSIS · VII
 M · AVR · PTOLEMAEVS
 COLVGIMIRENTI
 SVÆ · HOC · SCRIPSIT
 ET CETERIS LIBERIS
 LIBERTIS QVE · EIVS

d. m. | Aureliae Marcianae, | incomparabili femi | nae quae
 vixit annis | XXV et mensis VII, | M. Aur(elius) Ptolemaeus |
 coniugi mirenti | suae hoc scripsit | et ceteris liberis | libertisque
 eius.

The letters vary in height from 2 to 3 cm., except the D · M, which are about 4 cm. high. There are traces of minium throughout the whole inscription. With *annis*, *mensis*, cf. *C.I.L.* VI, 26,224, 26,602, etc. *Mirenti* (= merenti) occurs often elsewhere, as *C.I.L.* X, 2280; cf. *beneficium*, X, 2507, *filiciter*, X, 6565.

9. Marble tablet (41 × 24 cm.), corroded, found at *Pozzuoli*, on the *Via Campana*, in 1896.

— D · M

P · B E N N I · A V G E N D I · E T
 B E N N I · E X O R A T I · E T
 B E N N I A E · C H A R I D I S · E T
 P O S T E R Ø R V M Q V E E O R V M

d. m. | P. Benni Augendi et | Benni Exorati et | Benniae
 Charidis et | posterorumque eorum.

The letters, which are carefully made, vary in the different lines from 2½ cm. to 3½ cm. (the height of the D · M). The seventh letter in the last line is plainly Ø, as if it were a ligature for EO. Perhaps POSTER(orum) EORUM was intended at

first, in which case ET of the preceding line was the connective; or, more likely, the stonecutter engraved ER a second time by mistake, and then corrected the E to O.

10. Large marble tablet ($81\frac{1}{2} \times 48$ cm.), found at *Pozzuoli, Via Campana*, in 1894. It was broken into three pieces and is incomplete in the lower left corner, although no letters are lost.

M • CAECILIVS • M • L • CLYMENVS
 SIBI • ET
 M • CAECILIO • AGENÓR | • PATRÓN • ET
 CAECILIAE • M • L • CHARITE • VXÓR |
 SVAE • ET
 COSSINIO • A • L • PANDARÓ
 ARGENTARIO • ET • SV | S

M. Caecilius, M(arci) l(ibertus), Clymenus | sibi et | M. Caecilio Agenóri, patrón(o), et | Caeciliae, M(arci) l(ibertae), Charite, uxóri | suae et | Cossinio, A(uli) l(iberto), Pandaró, | argentario et suis.

The letters, which vary in the different lines, from 5 cm. (top) to 3 cm. (bottom line), are carefully made, but the horizontal strokes are somewhat wavy. The length of the apices varies: that in AGENÓR is $6\frac{1}{4}$ cm. long; that in VXÓR, $2\frac{3}{4}$ cm.

11. Round marble ash-urn, found at *Pozzuoli* in 1888; copied by de Criscio, by whom it was once owned.

M • CAECILIVS • CLYMEN |
 L • FELIX • ET

M. Caecilius, Clymeni | l(ibertus), Felix et

Cf. *M. Caecilius Clymenus* of the preceding inscription.

12. Marble tablet, found at *Pozzuoli*; copied by de Criscio.

DIS • MANIB
 C • CALVIO
 ALEXANDRO
 MARCVS

dis manib(us) | C. Calvio Alexandro | Marcus.

13. Marble tablet, found at *Pozzuoli*, in 1894; copied by de Criscio.

D · M ·

CINCIAE · TYCHE ·
C · DVCENIVS · ATHE ·
NODORVS · CONIV ·
GI · BENE · MERENTI ·

d. m. | Cinciae Tyche | C. Ducenius Athe | nodorus coniugis bene merenti.

14. Marble tablet ($50\frac{1}{2} \times 42\frac{1}{2}$ cm.), found at *Pozzuoli*, *Via Campana*, in 1897.

DIIS

MANIBVS
CLYTI

Diis Manibus Clyti.

The letters are of the best period, carefully and regularly made; height, first line, $6\frac{1}{2}$ cm., second line, $4\frac{1}{2}$ cm., third line, $5\frac{1}{2}$ cm.

15. Marble cippus (102 cm. high \times 41 cm. wide \times 20 cm. thick), gable-shaped top, with the sacrificial patera in the pediment; found at *Pozzuoli*, *Via Domiziana*, in 1895.

D · M

CORNELIAE
HERMIONENI
CORNELIVS
HERMOGENES
ET CORNELIVS
AQUILINVS
MATRI

B · M · F

d. m. | Corneliae | Hermioneneni | Cornelius | Hermogenes | et Cornelius | Aquilinus | matri | b(ene) m(erenti) f(ecerunt).

The letters are 3 cm. high. The sepulchral inscription of a *Cornelius Aquilinus* of Pozzuoli occurs *C.I.L.* X, 2325.¹

16. Round marble ash-urn (55 cm. high \times 1.21 m. circumference), found, as was no. 17, at *Pozzuoli, Via Domiziana*, in 1896.

HOSSA·HIC

LVCI·COSSINI

Hossa hic | Luci Cossini.

Height of letters of first line, 4 cm., of second line, 2½ cm. There are traces of minium. Cf. *C.I.L.* X, 2344, 'atramento scripta in tectorio,' *Hossa hic* | *A. Cossini*.

17. Large marble tablet (65 \times 49 cm.), in three pieces.

L·FAENIVS·L·L·L

PHILOMVSVS

BOVIAI·L·SALVIAI

SIBI·ET·SVIS (sic)

VSTRINVM

L. Faenius *L(uciorum duorum) l(ibertus)* | *Philomusus* | *Boviai*,
G(aiae = mulieris) l(ibertae), *Salviai* | *sibi et suis* | *ustrinum*.

The letters are carefully made and vary in the different lines from 3½ to 6 cm. in height.

18. Marble tablet (23 \times 21 cm.), found at *Pozzuoli, Via Domiziana*, in 1894.

FAVSTVS

HIC

Faustus | hic.

The letters are about 4 cm. high.

¹ *Hermioneni* (dat. sing., 3d decl.) is an example of a heteroclite, often recurring in Latin inscriptions. From the nom. form, *Hermione* (*C.I.L.* X, 2646), we should expect regularly in the dat. case, *Hermionae*, or *Hermione* (*C.I.L.* XIV, 1178, and compare above *Charite*, no. 10, also *Agele*, no. 35, *Rodine*, no. 37). Compare *Threptenis* (gen. case), no. 24 and *Threptes*, *C.I.L.* X, 4204.

19. Marble tablet, found at *Pozzuoli*, in 1893; copied by de Criscio.

M
FORTVNATVS•
C•SELO•AGA
FILIO•SVO•QVI
ATVS•EST

[d] m. | . . . Fortunatus | . . . C. Selo Aga | . . . filio suo
qui | . . . atus est.

The name in the second line may have been *C. Seio Aga* . . . ;
cf. no. 36. Possibly the last line should be restored *hic humatus*
est as in *C.I.L.* X, 6330.

20. Marble tablet (25 × 24 cm.), found at *Pozzuoli*, *Via Campana*.

D • M
FORTVN
ATOEVTY
CHETIFILI
OVIXITANVM
V•PAREN•FECER

d. m. | Fortun | ato, Euty | cheti fili | o, vixit an(nis) V
m(ensibus) | V, paren(tes) fecer(unt).

The letters are about 4 cm. high. There are traces of
minium.

21. Marble slab, found at *Pozzuoli*, in 1894; copied by de Criscio.

D • M
GAUDENTIO
VIX•AN•N•XII
MES•XI•PVBLICIVS
LANVRIVS•ALVMNO
SVO•FEC

d. m. | Gaudentio | vix(it) an(nis) n(umero) XII | mes(ibus)
XI, Publicius | Lanurius alumno | suo fec(it).

In l. 5, *Lanurius* is probably a mistake in copying for *Iannarius*. *Publicius Ianuarius* occurs *C.I.L.* X, 2898.

22. Marble tablet, found at *Pozzuoli*, in 1894; copied by de Criscio.

D • M •
L • G E N V C I V ³
A E R O S
V I X • M E N
D • V I I

d. m. | L. Genucius | Aeros | vix(it) men(sibus) | . . .
d(iebus) VII.

23. Fragment ($61 \times 32\frac{1}{2}$ cm.) of a large marble tablet found at *Pozzuoli, Via Campana*, in 1896.

S I N V S • C A E S A R I S
• P O P L I C O L A N
• C O N L I B • G R A T I A N O
V E • L I B E R T I S

. . . Asinus Caesaris | . . . (ibert-) Poplicolan | . . . conlib(erto)
Gratiano | . . . [suisq]ue? libertis.

Well-formed letters of a good period; height, first line, 5 cm., second line, 4 cm., the other two lines, about $3\frac{1}{2}$ cm.

24. Marble tablet, found at *Pozzuoli*, in 1894; copied by de Criscio.

D • M •
I V C V N D E A L V M N A E
I V L I A E S • T R H E P T E N I S • (sic)
Q V A E • V I X T • A N N I S • V I
M • X I • D • X X • H E L B I V S •
M A R T I A L I S P A T E R •
V E N E M I R E N T I
F E C I T

d. m. | Iucunde alumnae | Iuliae Trheptenis | quae vix(it)
annis VI, | m(ensibus) XI, d(iebus) XX, Helbuis | Martialis
pater | vene mirenti | fecit.

Iuliaes is 'perhaps a feature of the Italian-Greek patois' (Lindsay, *Latin Language*, p. 381), or rather its origin is Italic-dialectic (von Planta, *Gram. d. Osk.-Umb. Dialekte*, vol. II, p. 88). *Helbius* and *vene* are examples of confusion in sound of *b* and *v* such as occur not infrequently from the beginning of the second century of our era (Lindsay, *Latin Language*, pp. 49 ff.).

25. Small marble tablet (18 × 17 cm.), found at *Pozzuoli*, *Via Domiziana*, in 1895.

C·I·V·L·I·O·
V·A·L·E·N·I·
A·N·N·O·R·X·I·I

C. Iulio | Valenti | annor(um) XII.

The letters, which are wavy, vary in the different lines from 4 to $2\frac{1}{2}$ cm. in height.

26. Scratched around the upper part of the body of a two-handled amphora (about 45 cm. high), found at *Pozzuoli*, *Via Domiziana*, in 1896.



E K A

The letters are about $2\frac{1}{2}$ cm. high.

27. Large marble tablet (74 × 48 cm.), found at *Pozzuoli*, *Via Campana*, in 1894.

(See the following page.)

C · L A R C I V S · C A T A P L V S
 S I B I · E T · L A R C I A E · G L Y C E R A E
 E T · L A R C I A E · T H A L L V S A E · E T
 M · M I N V C I O · Z E T H O · E T
 L I B E R T I S · L I B E R T A B V S Q V E · S V I S
 P O S T E R I S Q V E · E O R V M
 P O M A R I V M · M A C E R I A · C I N C T V M · C V M · T A B E R N A · E T
 A E D I F I C I S · S E P V L C R V M · E S T

C. Larcus Catapulus | sibi et Larciae Glycerae | et Larciae
 Thallusae et | M. Minucio Zetho et | libertis libertabusque suis |
 posterisque eorum. | Pomarium maceria cinctum cum taberna
 et | aedificiis sepulcrum est.

The height of the letters varies in the different lines from 5
 to $1\frac{1}{2}$ cm.

28. Marble tablet (44×30 cm.), found at *Pozzuoli, Via
 Campana*, in 1897.

M A R C I A · C · L ·
 C A L L I T Y C H E · S I B I ·
 E T · C · M A R C I O · P I S O N I
 P A T R O N O · P R A E D I C A T O R I
 E T · S V I S

Marcia, G(aia) l(iberta), | Callityche sibi | et C. Marcio
 Pisoni, | patrono, praedicatori, | et suis.

Neat, gracefully formed letters, tending towards ornamental
 waves. The height varies in the different lines from $6\frac{1}{4}$ to
 $2\frac{1}{2}$ cm.

The word 'praedicator' occurs in Appul. *Met.* 6. 114, being
 applied to Mercury in the service of Psyche, with the meaning
 of 'crier.' Perhaps 'praedicator' in the inscription is synony-
 mous with 'praeco.'

29. Fragment (104 × 29 cm.) of a large marble tablet, unbroken on the right side and the lower side; found at *Pozzuoli, Via Campana*, in 1895.

M • MARIO • POTHO • L • ET
CHRYSEROTI • L • ET • MYRTINI • L • ET
SYCHE • L • ET • SVIS • H • M • S • S • H • EXTRAR • N • S

M. Mario Potho l(iberto), et | Chryseroti l(iberto), et Myrtini l(iberti), et | [P]syche l(ibertae), et suis. H(oc) m(onumentum) s(ive) s(epulcrum) h(eredem) extrar(ium) n(on) s(equetur).

Height of letters of the first line, $5\frac{1}{2}$ cm., of the other two lines, 5 cm. The letters are carefully made.

30. Terra-cotta ash-urn, found at *Pozzuoli, Via Campana*, in 1897.

A • O B L I C I O •
O P T A T O •

A. Oblicio | Optato.

The shape and dimensions of the urn are about the same as of no. 7. The letters average in height about 5 cm. The inscription was painted with a pigment, which is now of a dirty white color. The upper lobe of the B is made with two straight lines, the lower one with a curve. The L is cursive. The P is not closed. On the age of the inscription, cf. note to no. 7.

On the inside of the present cover of this urn are some letters that now are very indistinct. They are written with the top of the letters inward, in a complete circle, so that it is difficult to determine where the writing begins. I seemed to be able to read

N A R D I N V S

I feel sure of the first four letters and of the last. De Criscio does not know positively whether the cover belongs to the urn in question.

31. Marble tablet, found at *Pozzuoli*; copied by de Criscio.

P A R I S
M V L I O
D E L I C I V M · Θ Ὶ R I
H I C · S I T V S · E S T

Paris | Mulio, | delictum Ourri, | hic situs est.

32. Marble tablet, found at *Pozzuoli*; copied by de Criscio.

P L O T I A · A · E T Ὑ · L · H E L E N A
S I B I
A · Π Ó T I O · L V C R I Ó N I · V I R O ---
H O S T I O · F E L I C I · L I B E R ----
P L O T I A E V E N E R I A E · L ·

Plotia A(uli) et G(aiae = mulieris) l(ibera) Helena | sibi
[et] | A. Pótio Lucríoni viro [et] | Hostio Felici liber [to et] |
Plotiae Veneriae l(iberae).

33. Marble tablet, found at *Pozzuoli*; copied by de Criscio.

Θ K
Γ · Π Ο Μ Π Η Ι Ω Ι
Α Τ Τ Ι Κ Ι Α Ν Ω Ν Ω Ι
Ζ Η C A N T I Ε Θ Η · Ι Ι Ι
Γ · Π Ο Μ Π Η Ι Ο C A T T Ι Κ Ι Α Ν Ο C

Θ(εός) Κ(αρχοντός) | Γ. Πομπήϊω | Ἀττικιανῶν, |
ζήσαντι ἐτη ΙΙΙ | Γ. Πομπήϊος Ἀττικιανός.

34. Marble tablet, found at *Pozzuoli*; copied by de Criscio.

M
L O R V F O
S R V F V S · P A T ·
E N E M E R E N T I
V I · A N · X X
B V

[d.] m. | ... lo Rufo | ... s Rufus, pat(rono) | ... [b]ene
merenti | ... vi(xit) an(nis) XX ... | ... [die]bu[s] ...

35. Marble tablet (44 × 20 cm.), broken into three pieces, found at *Pozzuoli*, *Via Domiziana*, in 1895.

M•SALONI•VS•CELSVS
SIBI•ET•EGNATIAE•AGELE
ET•M•SALONIO•CEL•SO•FIL
VIXIT•ANN•XIII•ET•SVIS

M. Salonus Celsus | sibi et Egnatiae Agele | et M. Salonio
Celso fil(io) | vixit ann(is) XIII et suis.

The letters are regularly made; height of first line, 3 cm.;
of other lines, a trifle over 2 cm.

36. Marble tablet, found at *Pozzuoli*, in 1892; copied by de
Criscio.

D•M
SELA•OLYMP
CONIVGI ME
CVM QVO VIX•AN•X
SINE VLLA QVAERELL
VIX•AN•XXXVIII•ME
DIEB XVIII FECIT

d. m. | Sela Olymp[ia] | coniugi me[renti] | cum quo vix(i)
an(nos) X | sine ulla quaerell[a] | vix(it) an(nis) XXXVIII,
me(nsibus) . . . | dieb(us) XVIII fecit.

SELA, l. 1, perhaps copied incorrectly for SEIA; cf. no. 19.

37. Marble tablet (46 × 19 cm.), found at *Pozzuoli*, in 1887.

D M
SEPTYMIA • ELPIS • SIBI •
P•TROFYMO•COIVGI ET
S PROSDOCIMO C SEPTYMIAE ET
S MAXIMO ET RODINE-LIBER
P•TROFYMO ET LL P MEIS

d. m. | Septymia Elpis sibi | P. Trofymo coiugi et | S. Pros-
docimo, C. Septymiae et | S. Maximo et Rodine liber(tae) | P.
Trofymo et l(ibertis) l(ibertabus) p(osterisque) meis.

The letters vary from 2 to 3 cm. in height, and are distinguished by having cornua, although the P is not closed. The fifth letter in the last line is cursive for F.

Among all the various possibilities of spelling *Trophimus* in inscriptions, we seem to have here a new one, *Trofymus*. With the name *Prosdocimus*, cf. *Eph. Epig.* VIII, 436.

38. Marble tablet, found at *Pozzuoli*, in 1893; copied by de Criscio.

S E R R V I V I
M E N O H A E
I N F R O N T · P · X I I
I N A G R · P · X V I ·

Serrvivi | Menohae | in front(e) p(edes) XII, | in agr(o)
p(edes) XVI.

The nomen is evidently corrupted. Perhaps the first line should read *Ser(vius) Rulli*; or possibly the nomen was *Vivi*, with dittography of R in the praenomen.

39. House-shaped marble ash-urn, found at *Pozzuoli*, *Via Domiziana*, in 1896. It is 34 cm. in height, by $33\frac{1}{2}$ cm. in width, and is 46 cm. long.

H A V E
T I T I N I A · S E L E V C I · L · D A N A E
V I X I T · A · X I I X

Have | Titinia Seleuci l(iberta) Danae, | vixit a(nnis) XIX.

The letters are neat but somewhat wavy; height, first line, 4 cm., second line, $2\frac{3}{4}$ cm., third line, 2 cm. The inscription is cut on one side of the roof-shaped top.

40. Fragment of marble tablet, broken into five pieces, found at *Pozzuoli*, *Via Campana*, in 1897.



Height of the Θ. $2\frac{1}{2}$ cm.; of the other letters (average), $1\frac{1}{2}$ cm.

Not feeling capable myself of restoring this interesting Greek inscription, I sent a copy of the fragments to Professor Federico Halbherr, of the University of Rome, who in turn forwarded it to Professor Comparetti. Professor Halbherr very kindly sent me Professor Comparetti's restoration, which I here present with much pleasure.

Ἐνθα κόρη κείμει πεποθημέν[ον ἄνθος ἅπασι
 Ὑστατον ἐν φθιμένοις φάος ἡελίου [μεταβάσα
 Τέσσαρας ἐβδομάδας κατάγουσα πικρῶ[ν ὑπὸ μόχθων,
 Ἐπτά δὲ κ(ύ)[κλους μοι] γοερούς, οὓς οὐκ ἐτέλεσσα,
 Δῶκε θεός· μήτηρ δὲ μ' ἐκόψατο καὶ γένος [ἄλλο?
 ο μηδὲ τ

Professor Halbherr adds that κύκλους is to be taken in the sense of *anni*, and that the verb κόπτω, med. ἐκόψατο, has here the meaning of 'mourn for,' *deplorare*, i.e. 'my mother and the rest of the family (γένος ἄλλο) mourned for me.'

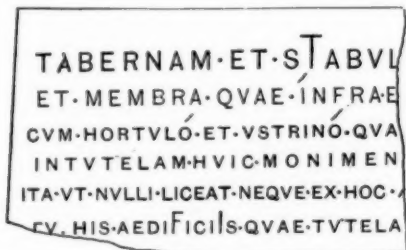
Professor M. L. D'Ooge, of the University of Michigan, has kindly furnished me with the following alternative restoration of the first four lines.

Θ(εοῖς) [Κ(αταχθονίοις)]
 Ἐνθα κόρη κείμει πεποθημέν[η ἢδ' ἀγαπητή.]
 Ὑστατον ἐν φθιμένοις φάος ἡελιο[ο ἰδοῦσα.]

Τέσσαρας ἑβδομάδας κατάγουσα πικρῶ[ς τέλος ἔσχον,]
Ἐπτα δὲ [καὶ μῆνας, γο]ερούς οὓς οὐκ ἔτελε[σθην]

φάος ἡελίοιο is Homeric, cf. *Il.* A 605.

41. Fragment (40 × 41 cm.) of marble tablet, unbroken on the top and the left side, found at *Pozzuoli, Via Campana*, in 1893.



Tabernam et stabul[a . . . | et membra quae infra e[scripta sunt? | cum hortuló et ustrinó qua[e . . . | in tutelam huic monimen[to cedunt? . . . | ita ut nulli liceat neque ex hoc [monimento? . . . neque] | ex his aedificiis quae tutela . . .

The letters are wavy, but carefully made: height, first line, $5\frac{1}{4}$ cm., second line, $4\frac{1}{2}$ cm., following lines, $3\frac{1}{2}$ cm. The bare tops merely of the letters of l. 7 can be seen.

42. Fragment (16 × 17 cm.) of marble tablet, corroded, unbroken certainly at the top, found at *Pozzuoli*, in 1897, in the *Via Solfatara* on the 'fundo' of de Criscio, where he has been newly building.



C. Anini[us . . . | Bellona[e . . . | sa]crum . . . | . . .

The letters are well made; height, first line, $3\frac{1}{2}$ cm., other lines, 3 cm. The letter following M in l. 3 is so indistinct that

I am unable to make it out. *Caninius* occurs as a nomen of this district, sometimes spelled with a K (*C.I.L.* X, 2626).

43. Marble tablet found at *Pozzuoli*; copied by de Criscio.

{ H N O E A P }
 { Λ Ε Υ Γ Ε Ν Α }
 { Ο Ι Γ Q E Q }
 { Ι Γ Α Γ Ε Ν }

... ηρσερ ... | ... λευσενα ... | ... λαισ? ε? σ ... | ...
 ιγαγεν ... |

The copy is perhaps faulty.

44. Lead pipe found at *Pozzuoli*, in 1892, a short distance west of the amphitheatre.

L · ACILI · STRABONIS

L. Acili Strabonis.

Length of inscription, 19½ cm., height of letters, 2¼ cm. De Criscio possessed fifteen copies of the same inscription. I examined eight of them, all of which seemed to have been made with the same stamp. De Criscio informed me he had sold one copy to a certain Neapolitan, who published it soon after in *Roma*, a newspaper of Naples, as having been found at Somma Vesuviana (near Pompeii). Eight copies of this same inscription on lead pipes are reported by Colonna, *Not. d. Scavi*, 1893, p. 211, as found in 'territorio Cumano.'

Nos. 45-48. Stamped tiles found at *Pozzuoli*.

45.



I A N V A R I · A · T · L ·

Ianuari A. T(ati) L(abeonis?)

Height of letters 1¾ cm., diameter of circle not quite 8 cm. There is a tile with the same stamp in the Naples Museum (*C.I.L.* X, 8042₆₁), but its provenance is not stated. Cf. no. 48.

46. Found in 1894, east of the amphitheatre.

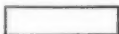


C I V L · D E Y T E R I

C. Iulii Deuteri.

Height of letters, $1\frac{1}{4}$ cm., diameter of circle, $6\frac{3}{4}$ cm. This same stamp is published *C.I.L.* X, 8042₆₄, but no example has previously been reported from Pozzuoli.

- 47.



S T · F M

Height of letters, $2\frac{1}{4}$ cm., dimensions of the stamp itself $9\frac{1}{2} \times 2\frac{1}{2}$ cm. Between T and F is a short slanting stroke; it may be a punctuation mark, but of this I am not sure.

- 48.



S V C C E S S I · A · T · L ·

Successi A. T(ati) L(abeonis?)

Height of letters, about $1\frac{1}{2}$ cm.; diameter of circle, about 8 cm. The same stamp has been found at Pompeii, and there is an example in the Naples Museum (*C.I.L.* X, 8042₉₉), but none has been previously reported from Pozzuoli. Cf. no. 45.

BAIAE

49. Said by de Criscio to have been found at *Baiæ*, in 1890, on a column of 'piperno,' and there copied by himself.

M A A R I V S M F

P R · D · S S

M. Marius, M(arci) f(ilius), pr(aetor), d(e) s(enatus) s(ententia).

It seems to be the same as *C.I.L.* X, 4651, which is of uncertain origin, but on account of the last line has been placed by Mommsen among the inscriptions of Cales.

50. Marble tablet (19×39 cm.), found at *Baiæ*, in 1897.

D M

VIBIAE
PROTENIS
DEMETRIVS
CONIVGIFECIT

d. m. | Vibiae | Protenis | Demetrius | coniugi fecit.

The letters vary in the different lines from 4 cm. (the D M) to $1\frac{3}{4}$ cm. (last line).

MISENUM

51. Marble tablet (23×24 cm.), found at *Misenum*, in 1895.

D ♂ M

P·AELIO·THEAGENEVE
TERANO EXCL·LR·MISEN (*sic*)
MILITAVIT·ERGODOTA
VIXIT·ANNIS LVIII M·XI
AVRELIÀ SYNTYCHE
CONIVGI·B M F

d. m. | P. Aelio Theagene, ve | terano, ex cl(asse) pr(aetoria) Mis(en)atium). | militavit ergodota, | vixit annis LVIII, m(en)sibus) XI, | Aurelia Syntyche | coniugi b(ene) m(erenti) f(ecit).

The height of the D·M is about 2 cm.; that of the other letters varies, but they average about 1 cm. The LR in l. 3 is a mistake of the stonecutter, of course, for PR.

Ἐργοδότης occurs in *C.I.G.* 3467, l. 22, in a letter (459 A.D.) of a magistrate, written at Sardis regarding the regulations of contractors (ἐργολάβοι), and of those who hire work done,

locatores (ἐργοδοῦναι); also in *C.I.G.* Add. 4716, d²⁷. Cf. too *Xen. Inst. Cyri*, VIII, ii, 5. So far as I know, *ergodota* occurs nowhere else in Latin inscriptions. This may be, then, the name of a new 'munus classiarium.'

52. Fragment of a marble tablet, found at *Misenum*; copied by de Criscio.

D M
FABIAE
PROCVLAE
ZOSIMVS

d. m. | Fabiae | Proculae | Zosimus.

53. Marble tablet, found at *Misenum*, in 1892; copied by de Criscio.

D • M •
FL • ZOTICO
AVGVSTALI •
V • A • LXVII • M • V • D • I •
IVNIA • IANVARIA
MAR • ET • FL • EPTYCE
NE • ET • FL • VITALIS • PAT •
• B • M • F •

d. m. | Fl(avio) Zotico | Augustali, | v(ixit) a(nnis)
LXVII, m(ensibus) V, d(ie) I, | Iunia Ianuaria | mar(ito)
et Fl(avia) Eatyce | ne et Fl(avius) Vitalis pat(ri) | b(ene)
m(erenti) f(ecerunt).

54. Fragment of marble tablet, found at *Misenum*, in 1892; copied by de Criscio.

C • SVLPICI
ANVS • PRN
HIC • S

C. Sulpici . . . | anus, pra[efectus? . . . | hic s[itus est].

55. Fragment of marble tablet, found at *Misenum*; copied by de Criscio.

M • T V L L I
S E M P R O N
E T B E N

M. Tulli[us . . . | Sempron[ianus? . . . | et ben[e merenti . . .

56. Marble tablet (24 × 26 cm.), corroded, found at *Misenum*, in 1892.

D • M •
V A L E R I A E
A R S E N O E • Q •
V I X I T A N N I S
V I I I M E S I B V S
V I I I • D • X V I I I
B E N E M E R E N T I • F
V A L E R I A N I C E
A L V M N A E

d. m. | Valeriae | Arsenoe, q(uae) | vixit annis VIII, mesi-
bus | VIII, d(iebus) XVIII, | bene merenti f(ecit) | Valeria
Nice alumnae.

The letters are from 1½ to 2 cm. high. For *Valeria Nice*, cf. *C.I.L.* X, 3660, also of *Misenum*.

57. Marble tablet, found at *Misenum*; copied by de Criscio.

M • V E R R I V S
S T E P H A N V S • S I B I • E T V
C O I V G I • E T • L I B E R T

M. Verrius | Stephanus sibi et V[erriae . . . | coiugi et
libert(ae).

58. Fragment of lead pipe, found at *Misenum*; copied by de Criscio.

L. V E T P I . . .

We should read probably *L. Vetti* . . .

CUMAE

59. Fragment of marble tablet, found at *Cumae*, in 1894; copied by de Criscio.



It may be part of a dedicatory inscription to Septimius Severus, or Caracalla; thus,

... s E V E R o (or d I V I L. *Septimi Severi?*) ...
A R A B ... Pont. m A X . T r i b. pot. ...

60. Marble tablet (37 × 19 cm.), found at *Cumae*, in 1894.

HOSPES·VT·NOSCERE·POSS|S·

BRISEIS·MIHI·NOMEN·ADEPTVM·FVIT·QVATER·
SEPTENOS·NON·DVM·COMPLEVERA·MENSES·SED
MEA·FATA·|N|QVA·FVERE·TATA·NEC·PLVRES·ANNOS
VT·VIVERE·POSSEM· MORS·INMATVRA·AB
RIPVIT·ME·A PARENTIBVS ALBANO·MEO·

The letters of the first line are 2 cm. high, of the other lines, a trifle over 1 cm. high. The letters, EILFT, are not always easy to distinguish.

The word *tata* occurs several times in inscriptions of this district. For the meaning (= *pater*), cf. *C.I.L.* X, 7564.

The inscription appears to be roughly metrical, and various methods of seansion could be proposed, but perhaps it should be placed in the category of 'commatica,' according to Bücheler's classification (*Carmina Latina Epigraphica*, Lips. 1895-97), and be divided into lines as follows:

Hospes, ut noscere possis,
Briseis mihi nomen adeptum fuit.
Quater septenos non dum complevera menses,

Sed mea fata iniqua fuere, tata,
 Nec plures annos ut vivere possem,
 Mors immatura abripuit me a parentibus.

According to this arrangement, l. 3 is a complete dactylic hexameter (faulty in *Quāter*), l. 6 is a perfect iambic trimeter, and ll. 1, 2, 4, 5 are imperfect dactylic hexameters, ll. 4, 5 being complete pentapodies. Line 2 might perhaps be regarded as a very faulty pentameter. Professor Warren suggests that possibly l. 5 ran *Nec plures annos sivere ut vivere possem*, and that *sivere* was omitted, being so much like *vivere*. The first line may be the relic of some stock phrase, as for instance, *Hospes [ad hunc tumulum resiste] ut noscere possis*. Cf. Bücheler, 485, l. 3; 486, l. 4. With the metre in general may be compared Bücheler, 1566, 1590. *Albano meo* is of course the formal dedication, and is not included in the verse.

61. Marble tablet, found at *Cumae*, in 1890; copied by de Criscio.

D · M
 LIVIAE · VENERIAE
 LIVIA · PRODITE · PATR
 ONAE · PIENTISSIMAE ·

d. m. | Liviae Veneriae | Livia Prodite patr | onae pientissimae.

62. Marble tablet, found at *Cumae*, in 1892; copied by de Criscio.

OCTAVIAE · SAL
 VIAE · CONIVGI ·
 BENE · MERENTI
 C LAECANIVS ALEXAN
 DER

Octaviae Sal | viae coniugi | bene merenti | C. Laecanius
 Alexander.

63. Marble tablet, found at *Cumae*, in 1890; copied by de Criscio.

D • M •

SEPTIMIAE SEVERE

I I I I I I I I I I I I I I I I

QVAE • VIX • AN • XVII

SILVANVS • AVGV R

I I I I I I I I MER • FECIT

d. m. | Septimiae Severe | . . . | quae vix(it) an(nis) XVII |
 Silvanus augur | . . . [bene] mer(enti) fecit.

Line 3 and part of l. 6 were covered with plaster, so that de Criscio said he could not read them.

64. Piece of marble tablet, found in 1890; de Criscio's copy.

{ I M I A E D E M

De Criscio believes this to be a Christian titulus, referring to the house of the Cumaean martyr Maximus (ca. 800 A.D.).

Nos. 65-67. Lead pipes, all found at *Cumae*.

65. Found in 1895.

P • M A N L I • N O D E S T I •

P. Manli Modesti.

Length of inscription, 19 cm.; height of the letters, 2 cm.

The cognomen should, of course, be MODESTI, but in casting, the first letter was not formed perfectly.

66. Found in 1893.

P O N T A E H E P R E

Pontiae Hepyre.

Length of inscription, 16½ cm.; height of the letters, 3 cm.

67. Found in 1894.

V L P I A E • M A R C I A N A E

Ulpiae Marcianae.

Length of inscription, 30 cm.; letters about 2 cm. in height.

WALTER DENNISON.

UNIVERSITY OF MICHIGAN.

American School
of Classical Studies
in Rome

TWO NOTES

1. ON SOME OSCAN INSCRIPTIONS

FROM a study made in the summer and fall of 1896, both of the originals and of carefully made "squeezes," of some Oscan inscriptions in the National Museum at Naples, the following notes are offered.

Zvet. S.I.O. 10. — Independently of von Planta (*Gram. d. Osc.-Umb. Dialekte*, II, p. 536, no. 201), and of Conway (*The Italic Dialects*, n. 176; cf. also Add. II, p. 682), I arrived at the correct reading of this inscription:

mz.húrtiis.km.her.dúnúm.

That **mz.** is the proper beginning of the inscription is clearly proved by the cramped manner in which the last letters, and particularly the **m** of **dúnúm** are made, and by the generous space which the stone-cutter took for forming the **mz** and following letters; by the fact that there is no point between **m** and **z**, while there is one (not noticed by von Planta) between the **m** of **dúnúm** and the **m** of **mz**; finally by the occurrence of the praenomen **mz** in the inscription found at Pompeii and published in *Not. d. Scavi*, 1893, p. 212. See also *Rendiconti*, 1894, p. 641.

Zvet. S.I.O. 92. — This inscription should be read:

ahvdiu.ni.akun.CXII

Curiously enough the small square which serves as the interpunct between **ahvdiu** and **ni** has been overlooked heretofore. Only the upper left-hand corner, to be sure, is preserved, but the minium, with which the letters and other interpuncts are

painted, can still be clearly seen; besides, the part that is preserved is sufficiently large to establish the former existence of the point. There is a slight spacing as well between the words. (Cf. Conway, *The Italic Dialects*, II, Add. p. 680.)

This division of the first two words of the inscription does not help matters much, perhaps, for the meaning is still obscure. One naturally thinks at once of the *ni* as the regular abbreviation for the praenomen, Niumsis (*Numerius*), as in *S.I.O.* 69, 75, etc.; and of *ahvdia* as being a feminine name (cf. *Vitelius*) perhaps for *Audia*. Compare *avdius* (= *Audius*), *Not. d. Scavi*, 1893, p. 212.

Following Mommsen (*U.D.* p. 247), Fiorelli (*Mon. Epigr. Pomp.* I, pp. xxxiv-xxxv) takes *acun* as the abbreviation of a word which corresponds to Latin *acuna* (Varro, *R.R.* I, 10), and signifies a measure of land. Perhaps *acun* may have some connection with *acunum*, which is von Planta's conjectural reading (*op. cit.* II, p. 497) in *TB*₃₁, and which he suggests (p. 603) may have some connection possibly with an Oscan-Umbrian * *akno* = Latin '*annus*.'

Zvet. *S.I.O.* 65. — There is plainly a point after *úpsan* (l. 2).

Zvet. *S.I.O.* 135. — There seems to be no doubt about the reading of the two words *hefrens upsed*. Conway, however, believes



(*The Italic Dialects*, n. 140) that the last letter, the *s* of *hefrens*, being somewhat fainter than the preceding letters, was made at a different time. But one who compares the form of this *s* with

that of the **s** in **upsed** will be at once struck by the close resemblance; nor is the latter **s** made much deeper than the former. Besides, all of the letters of this inscription must have been made at practically the same time, namely, before the tile was baked. Conway (*l.c.*) also characterizes the letters following **heirens** as 'random,' and reads the last letter as **N**. In this he is surely wrong, for the oblique stroke is part of a long line, which, with three other lines meeting in the centre of the tile, form a kind of design. Von Planta's reading (n. 166, p. 526) is much more accurate. It seems to me the extant letters are simply and only **frssii**. After **fr** the writer seems to have scratched two small **s**'s, and not being satisfied with them, to have made two others larger and better over the same place. There is not the slightest indication that the second letter after **s** is a **d**. In fact, so much space on the tile is preserved after the vertical stroke that if the letter had been **d**, there would surely be some trace of the rest of the letter, since by comparison with the other **d** and the **r**'s of this inscription, one sees at once that the line forming the bow of the letter is prolonged in each case so as to cross even the vertical line. There would be just about room enough on the tile, if it were intact, for one more letter, so that I should suggest reading

heirensfrssii[**s**

upsed

**Her(r)enus*¹ **Fressius*²

fecit

2. ON COMMENTARIUM ACTORUM SAECULARIUM QUINTORUM, l. 64

I wish to call attention to an error which has crept into the transcription of this line. As published in the *Mon. Ant. d.*

¹ **heirens** must, from its form, be a praenomen.

² *Fressius* would bear about the same relation to *Fresidius* (cf. *Frensidius*, C.I.L. IX, 3862) that *Tussius* would to *Tussidius*, or *Caesius* to *Caesidius*, *Sestius* to *Sestidius*, etc.

Accad. dei Lincei, I, Tav. A (following p. 672), l. 64 reads A · D · VIII · K · IVN ·, etc., and this is exactly the way the stone itself reads. But the transcription appended runs, *A. d. VIII. K. Iun.*, etc.; and from this probably was repeated in *Eph. Epig.* VIII, p. 229, and pp. 249, 250, where the passage is commented upon. This error was not noticed by Slaughter, *Trans. Am. Phil. Assoc.*, 1895, p. 70.

WALTER DENNISON.

BIBLIOGRAPHY

OF

CURRENT ARCHAEOLOGICAL LITERATURE¹

1898

January — June

HAROLD N. FOWLER, *Editor*

^{*.*} Books, pamphlets, and other matter for the Bibliography should be addressed to Professor FOWLER, 49, Cornell Street, Cleveland, Ohio.

GENERAL AND MISCELLANEOUS

- Th. Achelis**, Zur Einführung. *Archiv für Religionswissenschaft*. Vol. I, 1898, pp. 1-8.
- Provisorisches Statut für das k. k. oesterreichische Archäologische Institut in Wien. *Jahreshefte d. Oesterr. Arch. Inst.* I, 1898, *Beiblatt*, pp. 1-4.
- H. Avelot**, Autour de l'archipel. Croquis de Grèce et de Turquie (1896-1897). Tours, 1897, Maure et Fils. Texte et dessins; 208 pp. 8vo.
- P. A. de Azevedo**, Notícias archeologicas colhidas em documentos do seculo XVIII. *O Archeologo Português*, 1897, pp. 214, 217, 247-252.
- Extractos archeologicos das 'memorias parochias de 1758.' *O Archeologo Português*, 1897, pp. 225-244.
- Estudos sobre Troia de Setubal. *O Archeologo Português*, 1897, pp. 257-265.
- E. Babelon**, On the Collection left by E. Le Blant to the Cabinet des Médailles. *C. R. Acad. Insc.* 1898, pp. 18-20.
- **R. Cagnat**, **S. Reinach**, Atlas archéologique de la Tunis. Édition spéciale des cartes topographiques publiées par le ministère de la guerre, accompagnées d'un texte explicatif. Paris, 1892, Leroux. Folio. Part II, 1893: 8 pp.; cuts, and 1 pl. Part III, 1895: 12 pp.; cuts, and 1 map. Part IV, 1896: 11 pp.; cuts.
- K. Baedeker**, Spain and Portugal: Handbook for Travellers. London, 1898, Dulau. 704 pp.; 6 maps; 46 plans. 12mo.

¹ For an explanation of abbreviations, see p. 346.

C. de Beaurepaire, Mélanges historiques et archéologiques concernant le département de la Seine-Inférieure, et plus spécialement la ville de Rouen. Rouen, 1897, Gy. 415 pp.; pls. 8vo.

M. R. de Berlanga, Estudios epigráficos. Una inscripción ibérica inédita de la Turdetania. *Revista de archivos, bibliotecas y museos*. Tercera época, I, 1897, pp. 481-497; 1 cut.

Bibliographie. *R. Arch.* XXXII, 1898, pp. 147-160; *Arch. Anz.* 1898, pp. 79-106, 148-169.

Boletín de la Comisión provincial de monumentos. (Orense.) 1898. (Marzo), No. 1, Informe relativo al descubrimiento y estudio de un mosaico y otros restos de la época romana en Rua-Petín. — Catálogos del Museo provincial y de la Biblioteca. La epigrafía latina en la provincia de Orense. — El Album de la Comisión [a list of the photographs of the monuments in the province].

H. Botelho, Duas necropoles no concelho de Villa-Pouca-de-Aguaiar. *O Archeologo Português*, Vol. III, 1897, p. 256; pl.

Acquisitions of the British Museum in 1896: Department of Greek and Roman Antiquities; Department of British and Mediaeval Antiquities and Ethnography; Department of Coins and Medals. *Arch. Anz.* 1897, IV, pp. 195-197.

J. Bulić, Nuovi ritrovamenti preistorici a Grabovac. *Bull. di Arch. e Storia Dalmata*, 1898, pp. 14 f.

— Tre oggetti di pietra preistorici trovati in Dalmazia. *Bull. di Arch. e Storia Dalmata*, 1897, pp. 192 f.

Ch. Buttin, A propos d'un casque à trois crêtes. *Revue Savoisiennne* [Annecy], XXXVIII, 1897, pp. 237-252; 1 pl.

Les camées en pierre dure. *Intermédiaire des chercheurs et des curieux*, November 20, 1897.

E. Camoreyt, Études de géographie historique; La ville des Sotiates. *Revue des Pyrénées*, Vol. IX, 1898, pp. 605 f.

E. Cartailhac, Le torques d'or du musée de Bordeaux. *L'Anthropologie*, Vol. VIII, 1897, No. 5, pp. 584-586; cut.

T. R. de Castilla, Inventario de los objetos recogidos en el Museo arqueológico de la Comisión provincial de Monumentos de Badajoz. Badajoz, 1896. 240 pp. 4to.

— Inventario de las monedas coleccionadas en el museo de la Comisión provincial de Monumentos de Badajoz. Badajoz, 1897. 224 pp. [pp. 241-464]. 4to.

Catalog des Reichs-Postmuseums. Berlin, 1897. J. Springer. xvi, 575 pp. 8vo. Containing: I. Verkehrswesen im Alterthum, pp. 1-40; 21 cuts.

Caziot, Découvertes d'objets préhistoriques et protohistoriques, faites dans l'île de Corse. *Bulletin de la Société d'Anthropologie de Paris*, Tome huitième, IV^e Série, 1897, pp. 463-476.

J. M. Cirera, Notas de arqueología: II (on the discoveries at Abydos). *Boletín de la Sociedad Arqueologica Lutiana*, 1898, p. 275; III (the School of Plato), IV (discoveries in Pompeii), *ibid.* pp. 313-315.

- A. v. Cohausen**, Die Befestigungsweisen der Vorzeit und des Mittelalters, hrsg. von M. Jähns. Wiesbaden, 1898, Kreidel. xlv, 340 pp.; cuts; atlas of 57 pls. Large 8vo.
- Congrès Archéologique de France. Soixante-deuxième session. Séances générales tenues à Clermont-Ferrand, en 1895, par la Société française d'archéologie, pour la conservation et la description des monuments. Paris, 1897, Picard. ix, 381 pp. 8vo.
- R. Cotroneo**, Ricerche sul fiume Alec di Strabone. *Rivista Storica Calabrese*, Vol. V, 1897, No. 44 (Ott. 15).
- F. Belchior da Cruz**, Museu Municipal da Figueira da Foz. *O Archeologo Português*, 1897, p. 191.
- H. Dannenberg**, Alfred v. Sallet. *Revue belge de numismatique*, 54^e année, 1898. No. 2, pp. 203-205.
- G. Ebers**, Fälschungen antiker Porträts. *Neue Freie Presse*, März 6, 1898.
- R. Engelmann**, Die Nuhagen Sardinien und ähnliche Bauwerke. *Sonntagsbeilage der Vossischen Zeitung*, 1898, Nos. 9, 10, 11, *Arch. Anz.* 1898, p. 122.
- Erwerbungen des Museums [zu Wiesbaden]. *Mitth. des Vereins für Nassauische Altertumskunde und Geschichtsforschung*, 1897-98, pp. 31-34 (April 1, 1896-March 31, 1897), pp. 106-108 (April 1, 1897-December 31, 1897).
- E. Fina y Girbau**, Descubrimientos arqueológicos en la plaza de Llafranch. *Revista de la Asociación artístico-arqueológica Barcelonesa*, II, 1898, pp. 475-480.
- H. N. Fowler**, Editor, *Archaeological News* (August, 1897-February, 1898). *Am. J. Arch.* Second Series, II, 1898, pp. 95-152.
- *Archaeological Discussions* (August, 1897-February, 1898), *ibid.* pp. 237-346.
- H. v. Fritze**, Die nackte orientalische Göttin. *Jb. Arch.* I. 1897, IV, pp. 199-203; 4 cuts.
- W. Froehner**, Collections du château Goluchów. Paris, 1897, L'Orfèvrerie. xxviii, 106 pp.; 22 pls. 4to. [Only 200 copies printed.]
- Collection d'antiquités du Comte Michel Tyszkiewicz. [Auction-catalogue.] Paris, 1898, Rollin & Feuardent. [312 numbers.] 97 pp.; 15 pls.; 5 cuts. Large 4to.
- P. F. Matos Galamba**, Estudos sobre Salacia. *O Archeologo Português*, Vol. III, 1897, pp. 266-271; 2 cuts.
- G. J. de Guillen Garcia**, En el sitio que hoy ocupa Tarragona, hubo en remotos tiempos un pueblo de la edad de piedra como se ha supuesto? *Revista de la Asociación artístico-arqueológica Barcelonesa*, II, 1898, No. 8, pp. 598-604.
- F. P. Garofalo**, I celti nella penisola iberica. Girgenti. 1897. 20 pp.; 4to.
- Iberi nella Gallia. *Boletín de la Real Acad. de la Historia*, Vol. XXXII, 1898, pp. 294-345.
- P. Gauckler**, Musée Alaoui. Part II, 1897. 170 pp.; [pp. 115-284]; 19 pls. Musées et collections archéologiques de l'Algérie et de la Tunisie. Paris, Leroux. 4to.

- J. Gaulke**, Über polychrome Plastik. *Die Gegenwart*. 26 Jahrgang, Band 52, 1897, pp. 408-410.
- Giovanni Gozzadini**, Lettere di storia e archeologia. Pubblicate da N. Malvezzi, con prefazione di G. Carducci. Vol. I. Bologna, 1898, Zanichelli. lxxiii, 364 pp. 8vo.
- J. N. Gröbl**, Die Münzsammlung. *Jahrbuch des historischen Vereins Dillingen*, 1897, pp. 230-233.
- St. Gsell**, Musée de Philippeville. 1898. 93 pp.; cuts. Musées et collections archéologiques de l'Algérie et de la Tunisie. Paris, Leroux. 4to.
- E. Hardy**, Was ist Religionswissenschaft? *Archiv für Religionswissenschaft*, Vol. I, 1898, pp. 9-42.
- J. Heierli**, Ein Gräberfeld der La Tène-Zeit bei Gempnach (Champagny) im Kanton Freiburg. *Anzeiger für Schweizerische Altertumskunde*, XXX, 1897, pp. 126-130; pls. xi, xii.
- A. Hildebrand**, Das Problem der Form in der bildenden Kunst. Second edition. Strassburg, 1898, J. H. E. Heitz. 127 pp. 8vo.
- H. V. Hilprecht**, Babylonian or Egyptian Civilization: which earlier? *S. S. Times*, April 23, 1898.
- M. Hoernes**, Wanderung archaischer Zierformen. *Jahreshefte d. Oesterr. Arch. Inst.* I, 1898, pp. 9-13; 9 figs.
— Urgeschichte der bildenden Kunst in Europa von den Anfängen bis um 500 v. Chr. Gedruckt mit Unterstützung der Kais. Acad. der Wissenschaften. Wien, 1898, A. Holzhausen. xxii, 709 pp.; 36 pls.; 203 cuts. Large 8vo.
- K. Jaufmann**, Das Museum. *Jahrbuch des historischen Vereins Dillingen*, 1897, pp. 216 f.
- B. Jelinek**, Das neue städtische Museum in Prag. *Mitth. d. Anthropologischen Gesellschaft in Wien*, XXVII (N. F. XVII), No. 6.
- C. Keller**, Figuren des ausgestorbenen Ur (Bos primigenius Baj.) aus vorhomerscher Zeit. *Globus*, 1897, no. 22. pp. 341-344; 3 cuts [of the cups from Vafio].
- J. Kirchmann**, Das alamannische Gräberfeld bei Schretzheim. *Jahrbuch des historischen Vereins Dillingen*, 1897, pp. 169-181.
- Klein**, Bericht über die Verwaltung des Provincial-museums zu Bonn in der Zeit vom 1 April, 1896, bis 31 März, 1897. *Nachrichten über deutsche Alterthumsfunde*, VIII, 1897, pp. 69-72.
- F. Kofler**, Nachtrag zur archäologischen Karte des Grossherzogtums Hessen. *Archiv für hessische Geschichte und Altertumskunde*, N. F. Vol. II, 2, pp. 441-481.
- O. Kröhnke**, Chemische Untersuchungen an vorgeschichtlichen Bronzen Schleswig-Holsteins. Inauguraldissertation, Kiel. 1897. 72 pp.; 43 cuts.
- Kuttler**, Die Ausgrabungen bei Zöschingen, 1897. *Jahrbuch des historischen Vereins Dillingen*, 1897, pp. 133-141; pls. ii, iii.
- V. Kuzinszky**, Das Museum von Aquincum und seine Steindenkmäler. *Recueil de travaux relatifs à la philologie et à l'archéologie égyptiennes et assyriennes*. Vol. XX, 1898, pp. 95-164; 48 cuts.

- J. Lacave-Laplanche**, Le X^e congrès archéologique de Russie tenu à Riga (1896). *Bulletin Monumental*, 1897, pp. 141–153.
- Laville**, Station-préhistorique de Villeneuve-Triage. *Bull. de la Société d'anthropologie de Paris*, T. huitième, IV^e série, 1897, fasc. 3, pp. 212–219; 9 cuts.
- H. Lehner**, Museographie über das Jahr (1896). 1, Westdeutschland und Holland. *Westdeutsche Zeitschrift für Geschichte und Kunst*, 1897, pp. 315–375; pls. 13–22.
- Bericht über die Thätigkeit des Provincial-museums [zu Trier] in der Zeit vom 1 April, 1896, bis 31 März, 1897. *Nachrichten über deutsche Alterthumsfunde*, VIII, 1897, pp. 73–76.
- T. Lehoczky**, Germanic Monuments at Munkacs. *Archaeologiai Ertesitö*, 1897, pp. 333–338; pl.
- J. Leite**, De Vasconcellos Religiões da Lusitania na parte que principalmente se refere a Portugal. Vol. I. Lisboa, 1897, Imprensa Nacional. xl, 440 pp. 8vo.
- S. Levy**, Notes sur les Indo-Scythes. *J. Asiat.*, 1897, pp. 526–531.
- A. L. Lewis**, Ancient Measures in Prehistoric Monuments. *Journal of the Anthropological Institute of Great Britain and Ireland*, XXVII, 1897, pp. 194–203; pl. xiii.
- W. Lübke**, Essai d'histoire de l'art; traduit par C. Ad. Koëlla, d'après la 9^e édition originale. Paris, 1897, Fischbacher. 2 volumes. 8vo. [Vol. I, xii, 423 pp.; Vol. II, xii, 493 pp.]
- M.**, Les catalogues de la ville de Troyes. *Bulletin Monumental*, 1897, pp. 158 f.
- Les origines phéniciennes de Monaco et la voie Héracléenne, *ibid.* 158–160.
- H. Marlot**, Notes préhistoriques sur l'Avallonnais. *Bulletin de la Société des Sciences historiques et naturelles de l'Yonne* [Auxerre], Vol. 51, 1897, pp. 3–17.
- C. de Marchesetti**, Neue Funde von S. Lucia bei Tolmein. *Nachrichten über deutsche Alterthumsfunde*, VIII, 1897, p. 80.
- Le Comte de Marsy**, L'archéologie monumentale aux salons de Paris, 1897. *Bulletin Monumental*, 1897, pp. 133–140.
- C. Mehlis**, Über die historischen Denkmäler in Kanton Dürkheim, und deren Pflege. *Korrespondenzblatt des Gesamtvereins der deutschen Geschichts- und Altertumsvereine*, Vol. XLV, 1897, No. 12, pp. 138–147; 6 cuts.
- J. R. Mélida**, Account of acquisitions of the Museo Arqueologico Nacional. *Revista de archivos, bibliotecas, y museos. Tercera epoca*, I, 1897, pp. 519–524.
- H. Meyer**, Funde auf dem langobardisch-sächsischen Friedhofe bei Nienbüttel (Kreis Uelzen). *Nachrichten über deutsche Alterthumsfunde*, VIII, 1897, pp. 76–80; 11 cuts.
- Bernard de Montfaucon**, Lettres inédites du baron G. de Cassier, archéologue liégeois. Louvain, 1897, L. Halkin, Ch. Peeters. 78 pp. 8vo. [Extr. du *B. Arch. Liégeois*, Vol. XXVI.]
- Le mouvement artistique. Musées Nationaux [acquisitions since April, 1897]. *Revue de l'art ancien et moderne*. T. III, 1898, pp. 191 ff.

S. Muller, Udsigt over Oldtidsudgravninger, foretagne for Nationalmuseet i Aarene. 1893-96. *Aarbøger for Nordisk Oldkyndighed og Historie*, II Række, 12 Bind, 1897, pp. 161-224; 19 cuts.

Museu Municipal de Bragança. *O Archeologo Português*, Vol. III, 1897, p. 244.

J. L. Myres, Copper and Bronze in Cyprus and South-East Europe. *Journal of the Anthropological Institute of Great Britain and Ireland*, 1897, pp. 171-177; pl. xi.

Le Marquis de Nadaillac, Mégalithes de Loir-et-Cher. *Bull. de la Société d'anthropologie de Paris*, 1897, p. 260.

Ch. Normand, Les dernières fouilles de la tour de Vésone (Périgueux). *L'Ami d. Mon.* Vol. XI, 1897, pp. 295-301; 1 pl.; 1 cut.

— Plan archéologique de Caudebec (Seine-Inférieure). *L'Ami d. Mon.* Vol. XII, 1898, p. 33; pl.

O. Olshausen, Drei angebliche Eisenobjecte aus der zweituntersten Ruinenschicht von Hissarlik. *Zeitschrift für Ethnologie*, 1898, pp. 500-506.

A. Parat, Glanures archéologiques de Saint-Moré et d'Arcy; sépultures gallo-romaines et mérovingiennes. *Bulletin de la Société des Sciences historiques et naturelles de l'Yonne* [Auxerre], Vol. 51, 1897, pp. 19-26.

G. Payne, On the Preservation of Antiquities. *The Antiquary*, N. S. Vol. XXXIV, 1898, No. 100, pp. 104-106.

E. Petit, Le menhir de Chatel-Gérard (La Dame blanche); tumulus divers. *Bulletin de la Société des Sciences historiques et naturelles de l'Yonne* [Auxerre], Vol. 51, 1897, pp. 79-88.

Pfahlbauten im Bodensee. *Kb. Wd. Z. Ges. K.* 1898, coll. 33 f.

J. S. Phené, On Some Early Settlers near Conway. *Journal of the British Archaeological Association*, 1897, pp. 241-265; pls. i-v; 11 cuts; supplement. [Mycenaean elements in the prehistoric system of ornament in Ireland.]

G. Puig y Larrasz, Inscripciones ibéricas de Galicia. *Boletín de la Real Acad. de la Historia*, 1897, pp. 414-426; 8 cuts.

J. Th. de Raadt, Le musée de la Porte de Hal à Bruxelles et son nouveau catalogue. Bruxelles, 1897, C. Baune. 87 pp.; cuts. 8vo.

— Les fresques de "Leugemeete" (révélation d'un archéologue gantois) et le catalogue de la Porte de Hal. Bruxelles, 1898, C. Baune. 15 pp. 8vo.

Régence de Tunis, Direction des Antiquités et des Beaux-Arts. *Compte Rendu de la Marche du Service en 1897*. Tunis, 1898. Impr. Rapide (L. Nicolas et Cie.). 12 pp. 8vo.

Register zu Band XI-XX der *Z. Num.* Berlin, 1898, Weidemann'sche Buchhandlung. 62 pp. 8vo.

F. Regnault, Le Dieu Bès était myxoedémateux. *Bulletin de la Société d'anthropologie de Paris*. Tome huitième, IV^e Série, 1897, pp. 434-439; 2 cuts.

S. Reinach, Statuette de femme nue découverte dans une des grottes de Menton. *L'Anthropologie*, Vol. IX, 1898, No. 1, pp. 26-31; pls. i, ii; 4 cuts.

A. d. S. Rocha, Relatorio á cerca do Museu Municipal da Figueira da Foz. *O Archeologo Português*, Vol. III, 1897, pp. 252-255.

- J. de Rougé**, On Bronze Statuettes in the Museum at Cagliari, Sardinia. *B. Soc. Ant. Fr.* 1897, pp. 241-246. [The Sardinians are probably identical with the Shardana of Egyptian inscriptions.]
- L. de Hoyos Sainz**, L'Anthropologie et la préhistoire en Espagne et en Portugal en 1897. *L'Anthropologie*, Vol. IX, 1898, No. 1, pp. 37-51.
- L. Schäble**, Hügelgräber bei Kiecklingen. *Jahrbuch des historischen Vereins Dillingen*, 1897, pp. 142-158.
- K. H. Schaible**, Die Frau im Altertum. Ein kulturgeschichtliches Bild. 2 populäre Vorträge. Karlsruhe, 1898, G. Braun. viii, 96 pp. Large 8vo.
- M. Scheller**, Die Ausgrabungen bei Faimingen 1897. *Jahrbuch des historischen Vereins Dillingen*, 1897, pp. 159-168.
- K. Schumacher**, Die Besiedelung des Odenwaldes und Baulandes in vorrömischer und römischer Zeit. *Neue Heidelberger Jahrbücher*, VII, 1897, pp. 138-160.
- E. Schuré**, Sanctuaires d'Orient. Égypte, Grèce, Palestine. I. L'Égypte musulmane. II. L'Égypte ancienne. III. La Grèce héroïque et sacrée. IV. En Terre Sainte. Paris, 1898, Perrin. 8vo.
- Semrau**, Bronze-Depotfund von Czernowitz. *Zeitschrift für Ethnologie*, 1897, pp. 290 f.; 4 cuts.
- Société nationale des Antiquaires de France. Meeting of March 10, 1897. *R. Arch.* XXXII, 1898, pp. 135 f.
- A. Sorensen**, Museums-Album. No. 1. Ny Carlsberg Glyptothek. Copenhagen, 1897, Alb. Sorensen. 16 pp. 4to.
- A. Springer**, Handbuch der Kunstgeschichte. I. Das Alterthum. 5th edition by Ad. Michaelis. Leipzig, 1898, E. A. Seemann. viii, 228 pp.; 497 cuts; 2 pls. 4to.
- E. Szanto**, Archäologisches zu Goethes Faust. *Jahreshefte d. Oesterr. Arch. Inst.* I, 1898, pp. 93-105; fig.
- J. L. de V.**, Excavações reaes em Troia. *O Archeologo Português*, 1897, p. 265.
— A inscrição de Gallo. *O Archeologo Português*, 1897, p. 265.
— Acquisições do Museu Ethnologico Português. *O Archeologo Português*, 1897, pp. 271 f.
- G. Villier**, La danse à travers les âges. Paris, 1898, Hachette. Vol. I. 19 pls.; 400 cuts.
- R. Virchow**, Eröffnung prähistorischer und römischer Gräber in Worms. *Zeitschrift für Ethnologie*, 1898, pp. 406-470.
- A. Viré**, Nouvelles trouvailles préhistoriques dans la vallée du Lunain. Polissoirs, menhirs, dolmen. *Bull. de la Société d'anthropologie de Paris*, 1897, pp. 262-267.
- F. Vorelot**, Les entailles sur les roches de la chaîne vosgienne. *Bull. de la Société philomatique Vosgienne*, 1897.
- Gaston Vuillier**, A History of Dancing from the Earliest Ages to our own Times. New York, 1898, D. Appleton & Co. \$12.00.
- F. Wey**, I musei del Vaticano. 4th edition. Milan, 1897. 197 pp. 4to.

- F. Wickhoff**, Der zeitliche Wandel in Goethes Verhältniss zur Antike dargelegt am Faust. *Jahreshefte d. Oesterr. Arch. Inst.* I, 1898, pp. 105-122.
- Th. Wilson**, The Swastika. *L'Anthropologie*, Vol. VIII, 1897, pp. 611-617; 7 cuts.
- F. Winter**, Der diesjährige Wettbewerb in den Königlichen Museen zu Berlin. *Kunstchron.* 1897-1898, coll. 241-245.

EGYPTIAN ARCHAEOLOGY

- E. Amélineau**, Oldest Pottery of All. Interesting Discoveries in the Tomb of Osiris. *New York Sun*, May 8, 1898. [Translated from the *Paris Figaro*.]
— Les Fouilles d'Abydos en 1897-1898 et la découverte du tombeau d'Osiris. *C. R. Acad. Insc.* 1898, pp. 278-289.
- K. Baedeker**, Egypt, Handbook for Travellers. London, 1898, Dulau. 22 maps; 55 plans; 66 illustrations; 600 pp. 8vo.
— Égypte, Manuel du voyageur. Leipzig, 1898, K. Baedeker. 27 maps and plans of cities; 48 ground plans; 65 illustrations; xcii, 399 pp. 12mo.
- A. Baillet**, Le temple d'Apet à Carnac. *Recueil de travaux relatifs à la philologie et à l'archéologie égyptiennes et assyriennes*, Vol. XX, 1898, pp. 100-111; plan.
- F. W. v. Bissing**, Die statistische Tafel von Karnak. Leipzig, 1897, J. C. Hinrichs. xxxviii, 67 pp. 4to.
— Eine Bronzeschale mykenischer Zeit. *Jb. Arch. I.* 1898, I, pp. 28-56; 2 pls; 20 cuts. *Arch. Anz.* 1898, II, pp. 147 f.; 4 cuts.
- L. Borchardt**, Bericht über die Corrosion des Sandsteinmaterials der Tempelbauten auf Philae. *Sitzungsber. d. k. preuss. Akad. d. Wiss.* 1898, pp. 291-303; 12 illustrations. [Shows that the material of Egyptian temples is corroded by water. An argument against creating a reservoir at Philae.]
— Ein ägyptisches Grab auf der Sinaihalbinsel. *Zeitschrift für ägyptische Sprache und Alterthumskunde*, 1897, pp. 112-115.
— Bemerkungen zu den Särgen des mittleren Reiches. *Zeitschrift für ägyptische Sprache und Alterthumskunde*, 1897, pp. 116-118; 3 cuts.
— Die Dienerstatuen an den Gräbern des alten Reiches. *Zeitschrift für ägyptische Sprache und Alterthumskunde*, 1897, pp. 119-134; 18 cuts.
— Tombs of the First Egyptian Dynasty. *The Independent*, March 31, 1898, pp. 407 f.
- G. Botti**, Fouilles d'Alexandrie: le grand escalier de l'Acropole; l'Isium de la Colonne. *B. de l'Institut égyptien* [de Caire], 1897, pp. 29-47.
— L'inscription d'Arsinoé Philadelphos à la colonne Pompée. *B. de l'Institut égyptien* [de Caire], 1896, pp. 115-124.
- E. Brusch-Bey**, Ein neuer satirischer Papyrus. *Zeitschrift für ägyptische Sprache und Alterthumskunde*, 1897, pp. 140 f.; pl. i.
- E. A. W. Budge**, The Chapters of Coming Forth by Day. The Book of the Dead. London, 1898, K. Paul, Trench, Trübner & Co. Text, Translation, Vocabulary. Vol. I, xi, 517 pp.; Vol. II, cciv, 354 pp.; 21 pls.; Vol. III, 386 pp. 3 vols. 8vo.

- G. Daressy, Un plan égyptien d'une tombe royale. *R. Arch.* XXXII, 1898, pp. 235-240.
- G. Ebers, Die Körpertheile, ihre Bedeutung und Namen im Altägyptischen. pp. 79-174; 3 cuts. *Abhandlungen der Königlich Bayerischen Akademie der Wissenschaften. Philosophisch-philologische Classe.* Vol. XXI. Erste Abtheilung, München, 1898.
- A. Erman, Über die Inschriften der Gräber von Elephantine. *Sitzungsber. Preuss. Akad. d. Wiss. zu Berlin*, 1898, p. 219.
 — Zu den äthiopischen Hieroglyphen. *Zeitschrift für ägyptische Sprache und Alterthumskunde*, 1897, pp. 152-165.
 — Peter Le Page Renouf. *Zeitschrift für ägyptische Sprache und Alterthumskunde*, 1897, pp. 165 f.
- Ancient Fabrics from Egypt. *Berl. Phil. W.*, June 11, 1898, p. 766.
- George Foucart, L'histoire de l'écriture égyptienne d'après les dernières publications. *R. Arch.* XXXII, 1898, pp. 20-33.
 — Les sociétés anglaises en Égypte et le rôle de la France. *L'Ami d. Mon.* Vol. XI, 1897, pp. 260-272.
- Les fouilles d'Abydos, *Intermédiaire des chercheurs et des curieux*, December 10, 1897.
- F. Ll. Griffith, Notes. (Scarabs belonging to Mr. John Ward.) The Khyan group of kings. The Israel Stela. Additional Notes to 'Egyptian Literature.' *S. Bibl. Arch.* XIX, 1897, pp. 293-300.
- M. Lambert, Une inscription phénicienne à Avignon. *J. Asiat.* 1897, pp. 485-489.
- F. Legge, Coptic spell. *S. Bibl. Arch.* XIX, 1897, p. 302.
- J. Lieblein, Thotmès III, était-il le fils de Thotmès I? *S. Bibl. Arch.* 1898, pp. 93-95.
- O. Marucchi, Gli obelisci egiziani di Roma. Edizione riveduta ed ampliata e preceduta da una lettera del prof. E. Schiaparelli. Rome, 1898, Loescher. 156 pp.; 4 pls. 8vo.
- G. Maspero, Remarks on Amélineau's Report of Excavations at Abydos in 1897-1898. *C. R. Acad. Insc.* 1898, pp. 290-291.
 — Un nouveau conte égyptien. *Journal des Savants*, 1897, pp. 649-659, 717-731.
- J. de Morgan, Carte de la nécropole Memphite, Dahchour, Sakkarah, Abou-Sir. Gravée au bureau de dessin au ministère des travaux publics sous la direction d'H. Ravon Bey. 1898, Le Caire. (Leipzig, W. Hiersemann.) 11 colored maps; 1 plan. Fol.
 — Avec la collaboration de le Dr. Wiedemann, G. Jéquier, le Dr. Fouquet, Recherches sur l'origine de l'Égypte. *Ethnographie préhistorique et tombeau royal de Négadeh.* Paris, 1897, Leroux. ix pp.; 393 pls.; many cuts. 8vo.
- Tomb of Osiris. *The Standard*, May 3, 1898.
- A. de Paniajna, Sanctuaires de Karnak et de Lokmariaker. Paris, 1897, E. Leroux. 82 pp. 8vo.

- A. Pellegrini**, Glanures. *Recueil de travaux relatifs à la philologie et à l'archéologie égyptiennes et assyriennes*, Vol. XX, 1898, pp. 86-90.
- W. M. Flinders Petrie**, Deshasheh, 1897. With a chapter by F. Ll. Griffith. Fifteenth Memoir of the Egypt Exploration Fund. London, 1898. viii, 51 pp.
- Recent Research in Egypt. *S. S. Times*, February 19, 1898.
- The Relations of Egypt and Early Europe. *Transactions of the Royal Society of Literature*, Second Series, Vol. XIX, 1897, Part I, pp. 59-78; 9 cuts.
- Six Temples at Thebes. With a chapter by Spiegelberg. London, 1897, Quaritch. 32 pp.; 26 pls. 4to.
- Religion and Conscience in Ancient Egypt. Lectures at University College, London. London, 1898, Methuen. 180 pp. Large 8vo.
- Syria and Egypt from the Tell El Amarna Letters. London, 1898, Methuen. 196 pp. 8vo.
- R. Pietschmann**, Leder und Holz als Schreibmaterialien bei den Ägyptern. *Beiträge zur Kenntniss des Schrift-, Buch-, und Bibliothekwesens*, 1897, pp. 51-82.
- A. A. Pirie**, Dr. Grant Bay's Bequest to the University of Aberdeen, consisting of Egyptian Antiquities. *Aberdeen Free Press*, January 3, 1898.
- E. Pottier**, Le lotus dans l'architecture égyptienne. *Gaz. B. A.* 1898, pp. 77-86; 12 cuts.
- J. E. Quibell**, On the Date of the Period in Egypt called Neolithic, Libyan, and New Race. *Zeitschrift für ägyptische Sprache und Alterthumskunde*, Vol. XXXV, 1897, No. 2, pp. 134-140; cut.
- Prehistoric Rock-drawings in Egypt, at Silsitch Quarries. (Illustrations.) *The Graphic*, January 1, 1898. View of Quarry at Silsitch and Temple. *The Graphic*, January 15, 1898.
- Marquis de Rochemonteix**, Le Temple d'Edfou. Mémoires publiés par les membres de la Mission Archéologique française au Caire. Vol. II, publié par É. Chassinat. Part I. Paris, 1897, Leroux. 80 pp.; pls. 4to.
- George St. Clair**, Creation Records discovered in Egypt. Studies in the Book of the Dead. London, 1898, David Nutt. xii, 492 pp. 8vo.
- A. H. Sayce**, Gleanings from the Land of Egypt. *Recueil de travaux relatifs à la philologie et à l'archéologie égyptiennes et assyriennes*, Vol. XX, 1898, pp. 100 f.
- The Beginnings of the Egyptian Monarchy. *S. Bibl. Arch.* 1898, pp. 90-101; 1 pl.
- G. Schweinfurth** and **L. Lewin**, Der Salzfund von Qurna. *Zeitschrift für ägyptische Sprache und Alterthumskunde*, 1897, pp. 142 f.; 2 cuts.
- W. Spiegelberg**, Die Bauinschrift Amenophis' III. auf der Flinders-Petrie-Stele. *Recueil de travaux relatifs à la philologie et à l'archéologie égyptiennes et assyriennes*, Vol. XX, 1898, pp. 37-54; pl.
- C. Torr**, Sur quelques prétendus navires égyptiens. *L'Anthropologie*, Vol. IX, 1898, No. 1, pp. 32-35; 9 cuts.

- R. Virchow**, Beiträge zur Vorgeschichte Ägyptens. *Zeitschrift für Ethnologie*, 1898, pp. 389-401; 2 cuts.
- L. N. Walter**, A Bronze Uraeus of Unusual Form. *S. Bibl. Arch.* 1898, pp. 145 f.; 2 cuts.
- A. Wiedemann**, Observations on the Nagadah Period. *S. Bibl. Arch.* 1898, pp. 107-122.
- Hugo Winckler**, Zwei Inschriften über den Dammbbruch von Mareb. *Orientalische Literatur-Zeitung*, January, 1898. [Remarks on Glaser's publication with the same title.]

ORIENTAL ARCHAEOLOGY

- W. Abercrombie**, Decipherment of 'Hittite Inscriptions. *Glasgow Herald*, February 2, 1898.
- P. Aucler**, Le temple de Jérusalem au temps de Jésus-Christ. *Revue biblique internationale* (Paris), 1898, pp. 193-205.
- C. J. Ball**, Babylonian Hieroglyphics. *S. Bibl. Arch.* XX, 1898, pp. 9-23; 2 pls.; 2 cuts.
- J. Bauer**, Une nouvelle inscription hébraïque. *Revue des études juives* (Paris), XXXV, 1897, p. 305.
- W. Belck**, Chaldäische Forschungen, 7. Zur Frage nach dem ursprünglichen Standort der beiden assyrischen Inschriften Sardur's Sohnes des Lutipris. *Zeitschrift für Ethnologie*, 1897, pp. 302-308.
- Ph. Berger**, Note sur une inscription phénicienne à Avignon. *J. Asiat.* 1897, pp. 489-494.
- Stèle punique représentant une déesse. *B. Arch. C. T.*, Année 1896, pp. 221 f.; 1 cut.
- and **Rabbi Bäuer**, A Phoenician Inscription found at Avignon. *C. R. Acad. Insc.* 1897, p. 672.
- A. Billerbeck**, Geographische Untersuchungen. I, Nebukadnezar's Befestigung der Umgebungen von Babylon und der Angriff der Perser; II, Tigris, Surapi, Nahr-Dupalias, Uknu, und Ulai. *Mith. der Vorderasiatischen Gesellschaft*, III, 1898, No. 2, 50 pp.
- E. Blaumüller**, Heilig Jord. Reisebilder fra Palaestina. Copenhagen, 1898, Gyldendal. 4to; many illustrations.
- A. Boissier**, Notes d'assyriologie. *S. Bibl. Arch.* 1898, pp. 163-166.
- R. Buchwald**, Nabuchodonosor II von Babylon. Mit besonderer Berücksichtigung der Keilschriftforschung. Program des Gymnasiums in Gross-Strehlitz. Gross-Strehlitz, 1898, A. Wilpert. 20 pp. 4to.
- S. Bugge**, Lykische Studien, I. (Udgivet for Hans A. Benneches Fond.) Norsk Videnskabselskabets Skrifter, II, Historisk-filosofiske Klasse, 1897, No. 7, 91 pp. 8vo.
- K. Buresch**, Aus Lydien. Epigraphisch-geographische Reise Früchte, hinterlassen von K. B., hrsg. von O. Ribbeck. Leipzig, 1898, B. G. Teubner, xvi; 227 pp. Large 8vo. One cut, one map drawn by H. Kiepert.

- J. B. Chabot**, Notes d'épigraphie et d'archéologie orientale. I, Bustes et inscriptions de Palmyra (2 pls.) ; II, Les ruines de Palmyre en 1735. *J. Asiat.* 1897, pp. 308-355.
- P. Chebli**, Laodicée de Canaan. *Revue biblique internationale* (Paris), 1898, No. 2, pp. 272-275.
- Ch. Clermont-Ganneau**, La statue du dieu Obodas, roi de Nabatène. *J. Asiat.* 1897, pp. 518-521.
— Études d'archéologie orientale. Paris, Bouillon, 1897. Tome II ; 227 pp. Lex. 8vo.
— Observations sur les nouvelles inscriptions nabatéennes de Petra. *J. Asiat.* 1898, pp. 523-535.
— Observations sur la grande inscription phénicienne récemment découverte à Carthage. *C. R. Acad. Insc.* 1898, pp. 235-253.
- C. K. Conder**, The Hittites and their Language. 12mo, x, 312 pp.; 16 pls. New York, Dodd, Mead & Co.
- G. Daressy**, Notes et remarques. *Recueil de travaux relatifs à la philologie et à l'archéologie égyptiennes et assyriennes*, Vol. XX, 1898, pp. 72-86; 2 cuts.
- A. L. Delattre**, Carthage. Quelques tombeaux de la nécropole punique de Doumès (1892-1894). Lyon, 1897, Mouglia-Russaud. 31 pp. 8vo. [Extrait des Missions Catholiques.]
— Les fouilles de la nécropole punique de Carthage. *C. R. Acad. Insc.* 1898, pp. 210-216; pl.
- F. Delitzsch**, Die Entstehung des ältesten Schrift-systems oder der Ursprung der Keilschriftzeichen. Ein Nachwort. Leipzig, 1898, J. C. Hinrichs. 44 pp. 8vo.
- A. Eisenlohr**, Über altbabylonische Massbezeichnung. *Z. Assy.* Vol. XII, 1897, pp. 231-239.
- V. Guérin**, La Terre Sainte. I, Jérusalem et le nord de la Judée. Paris, 1897, Nourrit et Co. 343 pp.; 147 cuts. 4to.
- R. Heberdey**, Eine zweisprachige Inschrift aus Lykien. *Jahreshefte d. Oesterr. Arch. Inst.* I, 1898, pp. 37-42.
- H. V. Hilprecht**, The Babylonian Expedition of the University of Pennsylvania. Series A. Cuneiform Texts. Vol. I, pls. 1-50; Vol. II, pls. 51-100.
— The Babylonian Expedition of the University of Pennsylvania. Series A. Cuneiform Texts. Vol. IX. Philadelphia, 1898, R. Merkel. 90 pp. 4to. 92 pls. separately printed. Proper names of the time of Artaxerxes I, 43 pp. 4to.
— Oriental Research. *S. S. Times*, June 18, 1898.
- F. Hommel**, Assyriological Notes. *S. Bibl. Arch.* XIX, 1897, pp. 312-315.
- Sir H. H. Howorth**, The Early History of Babylonia. I, The Rulers of Kengi and Kish. *The English Historical Review*, XIII, 1897-1898, pp. 1-16.
— The Early History of Babylonia. II, The Rulers of Shirpurla or Lagash. *The English Historical Review*, XIII, 1898, pp. 200-228.
- Morris Jastrow, Jr.**, The New Version of the Babylonian Account of the Deluge. *The Independent*, February 10 and 17, 1898.

- Peter Jensen**, The Religion of the Hittites. *S. S. Times*, May 7, 1898.
 — Hittiter und Armenier. xxvi, 255 pp.; 10 pls.; map. 8vo. Strasburg, 1898. [The Hittites are to be regarded as the ancestors of the Armenians.]
- D. Kaufmann, A. Kaminka, J. Lévi**, L'inscription No. 206 de Narbonne. *Revue des études juives* (Paris), XXXV, 1897, pp. 292-296; Facsimile.
- J. A. Knudtzon**, Babylonisch-assyrische Altertümer in Kopenhagen. *Z. Assyriol.* Vol. XII, 1897, pp. 253-257.
- F. J. Lazcano**, La Palestina antigua y moderna. *La Ciudad de Dios*, 1898, No. 1.
- C. E. Lehmann**, Zwei Hauptprobleme der altorientalischen chronologie und ihre Lösung. Leipzig, 1898, E. Pfeiffer. x, 224 pp.; 2 pls.; 5 tables. 8vo.
 — Eine Urkunde die sich auf die Rüstungen des Cyrus gegen Lydien bezieht (Berlin Arch. Soc., March, 1898). *Arch. Anz.* 1898, II, pp. 122-123.
 — On the Babylonian Origin of the God Sarapis. November (1897) meeting of the Berlin Archaeological Society. *Arch. Anz.* 1897, pp. 168 f.
- D. W. McGee**, Zur Topographie Babylons auf Grund der Urkunden Nabopolassars und Nebukadrezars. *Beiträge zur Assyriologie*, Vol. III, 1897-1898, No. 4, pp. 524-560.
- G. Marmier**, Contributions à la géographie de Palestine et des pays voisins. *Revue des études juives* (Paris), XXXV, 1897, pp. 185-202.
- B. Meissner**, Altbabylonische Gesetze. *Beiträge zur Assyriologie*, Vol. III, 1897-1898, No. 4, pp. 493-523; 9 pls.
 — Babylonische Leichen-feierlichkeiten. *Wiener Zeitschrift für die Kunde des Morgenlandes*, Vol. XII, 1898, pp. 59-66.
- J. Méritan**, Note sur l'inscription punique de Champfleury [Avignon]. *Mémoires de l'Académie de Vaucluse* [Avignon], XVI, 1897, pp. 364-369.
 — L'inscription punique d'Avignon. *Revue biblique internationale* (Paris), 1898, No. 2, pp. 261-265; cut.
- É. Michon**, Inscription d'Amwās. *Revue biblique internationale* (Paris), 1898, No. 2, pp. 269-271; cut.
- Mittheilungen aus den orientalischen Sammlungen der Königl. Museen zu Berlin. Berlin, 1898, W. Spemann. Heft XII. 116 pp.; 25 pls. Folio. [Contains 'Ausgrabungen in Sendschirli, ausgeführt und beschrieben im Auftrage des Orient-Comités zu Berlin. II, Ausgrabungsbericht und Architektur.']
- F. Müller**, Beiträge zur Erklärung der altpersischen Keilschriften. *Wiener Zeitschrift für die Kunde des Morgenlandes*, Vol. XI, 1897, pp. 249-258.
- W. M. Müller**, Studien zur Vorderasiatischen Geschichte. *Mitth. der Vorderasiatischen Gesellschaft*, 1898, No. 3, 62 pp.
- H. Nicolas**, Rapport sur la nature des dépôts qui constituent le sol où a été découvert à Avignon une pierre portant une inscription phénicienne. *Mémoires de l'Académie de Vaucluse* [Avignon], XVI, 1897, pp. 370-374.
- Discoveries at Nippur: evidence of ancient trade. *Echo*, November 25, 1897.
- H. Nützel**, Katalog der orientalischen Münzen in den Königlichen Museen zu Berlin. Theil I. Berlin, 1898, W. Spemann. xviii, 423 pp.; lex. 8vo.

- J. Offord**, Two texts referred to in his report of the Oriental Congress: I, Story of the Deluge, from Sippara. II, Menepthah Stela, mentioning the Israelites. *S. Bibl. Arch.* XX, 1898, pp. 53-55.
- Paul Perdrizet**, Syriaca. *R. Arch.* XXXII, 1898, pp. 34-49. I, Triparadisos. II, La déesse syrienne Siméa. III, Les flottes romaines en Syrie.
- Persian Archaeology. *Echo*, January 4, 1898.
- Orientalische Literatur-Zeitung. Herausgegeben von F. E. Peiser. 1 Jahrgang. No. 1. Berlin, January 15, 1898. Wolf Peiser.
- F. E. Peiser**, Cuneiform Texts from Babylonian Tablets, etc. *Orientalische Literatur-Zeitung*. January, 1898. [Criticism of the publication with this title, by Pinches and King.]
- Aus dem Kaiserlich-ottomanischen Museum in Constantinople. *Orientalische Literatur-Zeitung*, January, 1898, p. 6. [Aramaic inscription from near Sindjirli, counterfeit of Siloah inscription, and list of Hittite inscriptions.]
- Hormuzd Rassam**, Door Lintel, discovered by Mr. George Smith at Kouyunjik. *S. Bibl. Arch.* XX, 1898, p. 52.
- J. Rouvier**, Les éres de Tripolis de Phénicie. *J. Asiat.* N. S., Vol. XI, 1898, pp. 5-34.
- Ruprecht Prinz von Bayern**, Die Ruinenstadt Gerasa in Adschlun (Syrien). *Zeitschrift des Münchener Alterthumsvereins*, N. F. IX, 1898, pp. 1-9; pl.; supplement; 10 cuts.
- A. H. Sayce**, Assyriological Notes. *S. Bibl. Arch.* XIX, 1897, pp. 280-292; 1 pl. — Haematite cylinder from Cappadocia. *S. Bibl. Arch.* XIX, 1897, p. 301; 1 cut.
- V. Scheil**, Le dieu-roi Bur-sin-Planète. *Z. Assyr.* 1897, p. 265.
- The New Babylonian Account of the Deluge, *The Independent*, January 20, 1898.
- Le roi Adaparos. *C. R. Acad. Insc.* 1898, pp. 220-226.
- Notes d'épigraphie et d'archéologie assyriennes. *Recueil de travaux relatifs à la philologie et à l'archéologie égyptiennes et assyriennes*, Vol. XX, 1898, pp. 55-71; pl.; cut.
- Recueil de signes archaïques de l'écriture cunéiforme (époque de Shargani, Gudéa, et des rois de la 2^e dynastie d'Ur, 4000-3000 av. J.-C.). Paris, 1898, H. Welter. 79 pp. 8vo.
- Un fragment d'un nouveau récit babylonien du déluge de l'époque du roi Ammizadougá (vers 2140 av. J.-C.). *Revue biblique*, VII, 1898, pp. 1-9; 2 cuts.
- H. Schmidt**, Die babylonische Istar und ihre Kunsttypen. (Berlin Arch. Soc., May, 1898.) *Arch. Anz.* 1898, II, pp. 128 f.
- M. Schwab**, Une liste hébraïque de noms géographiques de l'Afrique du Nord. *Revue des études juives* (Paris), XXXV, 1897, pp. 306 ff.
- P. M. Séjourné**, À travers le Hauran. *Revue biblique internationale* (Paris). 1898, pp. 275-287.
- Socin**, Zur Mesainschrift, II. *Bericht über die Verhandlungen der königlich sächsischen Gesellschaft der Wissenschaften zu Leipzig. Phil. historische Klasse*, 1897, pp. 171-184.

- F. Thureau-Dangin**, Les chiffres fractionnaires dans l'écriture babylonienne archaïque. *Beiträge zur Assyriologie*, Vol. III, 1897-1898, p. 588.
- Le marquis de Vogüé**, Notes d'épigraphie Araméenne. *J. Asiat.* 1897, pp. 197-217; 2 facsimiles.
- Notes d'épigraphie araméenne (suite). *J. Asiat. N. S.*, Vol. IX, 1898, pp. 129-146; 2 pls.
- On a Punic inscription from Carthage. *C. R. Acad. Insc.* 1898, p. 100.
- et **F. M.-J. Lagrange**, Recherches épigraphiques à Petra. *Revue biblique internationale* (Paris), 1898. No. 2, pp. 165-182; 3 cuts.
- W. H. Ward**, The Story of the Serpent and Tree. *American Antiquarian*, 1898, pp. 211-227; 18 cuts. [The story of Merodach illustrated by seal engravings.]
- Notes on Oriental Antiquities. 1. The Horse in Ancient Babylonia. 2. Nehushtan. *Am. J. Arch.* Second Series, II, 1898, pp. 159-168; 7 cuts.
- H. Winckler**, Musri, Meluhh, Ma'in. Ein Beitrag zur Geschichte des ältesten Arabien und zur Bibelkritik. *Mitth. der Vorderasiatischen Gesellschaft*, 1898. No. 1, 56 pp.; pl.
- Altorientalische Forschungen. 2 Reihe, Bd. I, Heft 1, 2. Leipzig, 1898, E. Pfeiffer. 102 pp. Large 8vo. Containing among other things: Assyrien und Tyrus seit Tiglat-Pileser III. — Sa'mal unter Sargon. — Zur Geschichte des alten Arabiens. I, Saracenen. II. Zur Inschrift von Teimar. III, Die Könige von Characene. — Polyandrie bei den Minäern.

CLASSICAL ARCHAEOLOGY

GREEK AND ROMAN

(Works treating of the monuments of the Greeks and Romans, but not exclusively of those of either.)

- Antike Sculpturen aus den Kgl. Museen zu Berlin. I Band. 75 Lichtdrucktafeln, 1 Bl., Text. Mit erklärendem Text von der Direction der Sammlung. 19 pp. Lex. 8vo. Berlin, 1898, Graphische Gesellschaft.
- Archäologisches Institut in Wien. Provisorisches Statut. *Zeitschrift für die österreichischen Gymnasien*, 1898, pp. 178 ff.
- P. Arndt**, Die Antiken im Antiquarium der K. Residenz zu München. *Zeitschrift des Münchener Alterthumsvereins*, N. F. IX, 1898, pp. 13-18; 6 cuts.
- Arndt, Brunn, Bruckmann**, Griechische und römische Porträts, Lief. xxxviii-xli, nr. 371-410. Munich, 1897-1898, Verlagsanstalt für Kunst und Wissenschaft, vormals F. Bruckmann.
- E. Babelon**, La collection Waddington au Cabinet des Médailles. (Inventaire; suite.) *R. Num.* 1898, pp. 1-70; pls. i-iv.
- Les camées antiques de la Bibliothèque Nationale. I. Les origines du Camée. *Gaz. B. A.* 1898, pp. 26-35; 1 pl.; 3 cuts.
- Les camées antiques de la Bibliothèque Nationale. Deuxième article. *Gaz. B. A.* 1898, pp. 217-228; 17 cuts.

J. A. Bernhardt, Schriftquellen zur antiken Kunstgeschichte. Auswahl für die oberen Gymnasialklassen. Dresden, 1898, L. Ehlermann. viii, 60, 64 pp. 12mo.

Bibliographie. *Arch. Anz.* 1898, I, pp. 79-106; II, pp. 148-169.

V. Brugnola, M. Tulli Ciceronis actionis in C. Verrem secundae liber quartus [de signis]. (Commentato.) Torino, 1897, Loescher. xix, 132 pp.

Reisen der HHr. Brünnnow, v. Domaszewski und Euting in der römischen *provincia Arabia*. *Arch. Anz.* 1898, II, p. 120.

H. Brunn. See Arndt, Brunn, Bruckmann.

H. Brunn, F. Bruckmann, Denkmäler griechischer und römischer Sculptur. Auswahl für den Schulgebrauch. Mit erläuterndem Text versehen von A. Furtwängler und H. L. Ulrichs.

Bulletin mensuel de l'Académie des inscriptions. *R. Arch.* XXXII, 1898, pp. 125-134, 302-306.

S. P. Bunting, Res nautica apud antiquos. Oxford, 1897, Blackwell. 20 pp. 8vo.

Cités anciennes et villes modernes. *La Construction Moderne*, 16 Octobre, 1897.

A. Conze, Archäologische Funde im Jahre 1897. *Arch. Anz.* 1898, II, pp. 110-112; 1 cut.

S. Cybulski, Tabulae, quibus antiquitates graecae et romanae illustrantur. Tab. IV, Navigia. St. Petersburg (Leipzig, K. F. Koehler). 1 pl. 56.5 x 74 cm.

E. Durrbach, Inferi. pp. 403-514; 6 cuts. Io. P. 367 fol. *Dictionnaire des Antiq. grecques et romaines* de Ch. Daremberg et Edm. Saglio, avec le concours de E. Pottier. Livr. 25.

J. Dutilh, Monnaies, stèles et terres cuites du musée gréco-romain d'Alexandrie. I, Nouvelles formes du dieu Nil et de la déesse Anouké, sa compagne, d'après des monnaies et des stèles du Musée gréco-romain d'Alexandrie. II, Le Phare antique d'Alexandrie, d'après les monnaies et un fac-simile en terre cuite, de la domination romaine en Egypte. *B. de l'Institut Égyptien* [de Caire], 1897, pp. 15-28; 4 pls.

A. J. Evans, Ashmolean Museum. Report to the Visitors for 1897. Without place and year. 15 pp. 8vo. [See also *Arch. Anz.* 1898, pp. 142 f.]

G. Finály, Four Minerva-statues. *Archaeologiai Ertesítő*, 1897, pp. 329-333; 4 cuts. [Hungarian.]

W. Froehner, Collection Auguste Dutuit. Bronzes antiques, or et argent, ivoires, verres et sculptures en pierre. Paris. 1897. Soc. typogr. de Châteaudun. 111 pp.; 126 pls. Large 8vo.

A. Furtwängler, Neue Denkmäler antiker Kunst. *Sitzungsber. Mün. Akad.* II, 1897, pp. 109-144; 3 cuts; pls. i-xii.

— See H. Brunn, F. Bruckmann.

Käufliche Gipsabgüsse (Provinzialmuseum in Trier). *Arch. Anz.* 1897, IV, p. 198.

Gymnasialunterricht und Archäologie. *Arch. Anz.* 1898, II, pp. 143 f.

- K. Herepey**, Scythian Discoveries. *Archaeologiai Ertesítő*, 1897, pp. 325-329; 8 cuts. [Hungarian.]
- P. Herrmann**, Erwerbungen der Antikensammlungen in Deutschland. 1896, Dresden. B, Terracotten; C, Bronzen; D, Gemmen und Gold. *Arch. Anz.* 1898, pp. 60-66; 8 cuts.
- Erwerbungen der Antikensammlungen in Deutschland. 1896, Dresden. E, Vasen. *Arch. Anz.* 1898, II, pp. 129-139; 12 cuts.
- Historische Wandkarten: I, Römisches Reich (1: 300,000). II, Griechenland (1: 625,000). Budapest, 1898, Kogutowicz & Co. [With Hungarian lettering.]
- A. Holm**, Aus dem Klassischen Süden. *Neue Jahrbücher für das klassische Altertum, Geschichte und deutsche Litteratur und für Pädagogik*, hrsg. von J. Ilberg und R. Richter. Erster Jahrgang, 1898, pp. 129-148.
- Hultsch**, Ein Flüssigkeitsmaass der Provinz Hispanien und die Fassungsräume einiger antiken Dotien. *Sächs. Ges.* 1897, pp. 199-208; 1 cut.
- Institutsnachrichten. *Arch. Anz.* 1897, IV, p. 197 f.
- Institutsnachrichten. *Arch. Anz.* 1898, II, pp. 144-146.
- Jahresbericht über die Thätigkeit des k. d. Arch. Instituts, 1897. *Arch. Anz.* 1898, II, pp. 107-110.
- A. Jeremias**, Nebo, in Ausführliches Lexikon der griechischen und römischen Mythologie, hrsg. von W. H. Roscher, Vol. III, coll. 45-69; 12 cuts. Leipzig, 1898, B. G. Teubner.
- O. Keller**, Die Schildkröte im Altertum. Prague. Verein für Volkskunde und Linguistik.
- Lehner**, Erwerbungen der westdeutschen Altertumssammlungen, 1896-1897. *Arch. Anz.* 1898, I, pp. 66-78; 7 cuts.
- Lessing, F. Winter**, Der Hildesheimer Silberfund. (Berlin Arch. Soc., January, 1898.) *Arch. Anz.* I, 1898, pp. 32-39.
- W. Levison**, Die Beurkundung des Zivilstandes im Altertum. Inaugural-Dissertation, Bonn.
- Victor Mortet**, Vitruvius Rufus, § 39, Mesure des hauteurs, et § 39 bis, Formule de l'arc surhaussé, fragment d'un Ms. de la bibliothèque de Valenciennes. 8vo. Paris, 1898. (Extr. from *Revue de Philologie*.)
- La mesure et les proportions des colonnes antiques d'après quelques compilations et commentaires antérieurs au douzième siècle. Paris, 1898. 8vo. (Extr. from *Bibliothèque de l'École des chartes*.)
- A. S. Murray**, Terracotta Sarcophagi, Greek and Etruscan, in the British Museum. London, 1898. Printed by order of the Trustees. 25 pp.; 11 pls.; 5 cuts. Folio.
- F. Noack**, Verkaufliche Diapositive. *Arch. Anz.* 1898, II, p. 144.
- Nouvelles archéologiques et correspondance. *R. Arch.* XXXII, 1898, pp. 136-146, 307-314.
- Osiander**, Vom zweiten hessischbayerischen archäologischen Anschauungskurs. *Neues Korrespondenz-Blatt für die Gelehrten- und Realschulen Württembergs*, 1898, No. 2, pp. 41-48.

- Pauly's Real-Encyclopädie der classischen Altertumswissenschaft. Fünfter Halbband (Barbarus-Campanus). Stuttgart, 1897, J. B. Metzler. 1440 coll. Large 8vo.
- K. Perels**, Über Flottenmanöver im Alterthum. *Marine Rundschau*, 1898, Heft 5, pp. 748-752.
- Georges Perrot**, Rapport de la commission des Écoles d'Athènes et de Rome sur les travaux de ces deux Écoles pendant l'année 1896-1897. *C. R. Acad. Insc.* 1898, pp. 116-141.
- Forty-fourth Meeting of German Philologists and Schoolmasters. Dresden, September 28-October 2, 1897. *Arch. Anz.* 1897, IV, pp. 188-195.
- Verkäuflche Photographien. *Arch. Anz.* 1898, II, p. 144.
- L. Régnier**, Les photographies archéologiques de Martin-Sabon. *Bulletin Monumental*, 1897, No. 2, pp. 105-115.
- M. Reich**, Tarent. Geog.-historische Skizze. *Deutsche Rundschau für Geographie und Statistik*, 1898, Heft. 7, pp. 304-306.
- Salomon Reinach**, Répertoire de la statuaire grecque et romaine. Tome II (en deux volumes), Sept mille statues antiques réunies pour la première fois, avec notices et des index. Vol. I, xxxviii, 416 pp.; Vol. II, 436 pp. 8vo. Paris, 1897 and 1898, Leroux. Each vol. 5 fr.
- Edward Robinson**, See Trustees of the Museum of Fine Arts (Boston).
- Rostovtsew**, Étude sur les Plombs Antiques. II, Tessères Officielles. *R. Num.* 1898, pp. 77-102.
- W. H. D. Rouse**, Atlas of Classical Portraits. London, 1898, Dent. Greek, 44 pp.; Roman, 72 pp. Large 16mo.
- L. F. Saska**, Mythologie der Griechen und Römer. Fünfte, verbesserte und erweiterte Auflage. Besorgt von F. Grob. Prag, 1898, L. Kober. 244 pp.; 72 cuts; 5 supplements. Lex. 8vo. [Bohemian.]
- J. v. Schlosser**, Nachträge zur Abhandlung: die ältesten Medaillen und die Antike. *Jahrbuch der kunsthistorischen Sammlungen des Allerhöchsten Kaiserhauses*, Vol. XIX, 1898, pp. 352 ff.
- W. Schmid**, Über den kulturgeschichtlichen Zusammenhang und die Bedeutung der griechischen Renaissance in der Römerzeit. Akad. Antrittsrede. Leipzig, 1898, Dieterich. 48 pp. 8vo.
- R. v. Schneider**, Porträtbüsten. *Arch.-Ep. Mitth.* 1897, pp. 232-234; pl. vii; 2 cuts.
- K. Sittl**, Studj sulle costruzioni antiche delle *τείχων, πύργοι*, turres, speculae. *Rivista di storia antica*. Messina, Vol. II, Part 3.
- G. Thiele**, De antiquorum libris pictis capita quattuor. Marburg, 1897, Elwert. iii, 44 pp. 8vo.
- G. Treu**, Erwerbungen der Antikensammlungen in Deutschland, 1896. Dresden, A. Skulpturen. *Arch. Anz.* 1898, I, pp. 52-59; 16 cuts.
- Trustees of the Museum of Fine Arts**, Twenty-second Annual Report, for the year ending December 31, 1897. Boston, 1898, A. Mudge & Co. printers. 80 pp. 8vo. [See also *Arch. Anz.* 1898, pp. 130-142.]
- Vacation-course in Archaeology in London. *Arch. Anz.* 1897, IV, p. 195.

- Verein von Altertumsfreunden im Rheinlande, Winkelmannsfest. 1897.
Report in *Berl. Phil. W.* February 12, 1898, from the *Kölnische Zeitung*.
- Wagner and Drexler**, Neilos, Ausführliches Lexicon der griechischen und römischen Mythologie, hrsg. von W. H. Roscher, Vol. III, coll. 87–103; 4 cuts. Leipzig, 1898, B. G. Teubner.
- H. B. Walters**, Monthly Record (Archaeology). *Cl. R.* 1898, pp. 185 f., 282 f.
- J. C. Watt**, Examples of Greek and Pompeian Decorative Work. London, 1898, Batsford. Folio.
- Warwick Wroth**, Monthly Record (Archaeology; Coins). *Cl. R.* 1898, pp. 87 f., 283.

GREEK

(Including also titles of works relating to pre-Hellenic inhabitants of Greece and to kindred peoples, and to monuments of Hellenic art wherever found.)

I. GENERAL AND MISCELLANEOUS

- K. S. Abemelek Lazaren**, Gerasa. An Archaeological Investigation. St. Petersburg, 1897, E. Evdokimov. 56 pp.; 16 pls.; map. 4to. [Russian.]
- J. G. C. Anderson**, A Summer in Phrygia: I. *J.H.S.* 1897, pp. 396–424; 1 map. — A Summer in Phrygia. II. *J.H.S.* 1898, I, pp. 81–128; 2 pls.
- B. Apostolidès**, Essai sur l'hellénisme égyptien et ses rapports avec l'hellénisme classique et l'hellénisme moderne. L'hellénisme sous l'ancien et le moyen empire. Tome 1^{er}, fascicule 1^{er}. Paris, 1897, Welter. xlviii, 62 pp. Svo.
- Léon Le Bas**, Voyage archéologique de Ph. Le Bas en Grèce et en Asie Mineure du 1^{er} janvier 1843 au 1^{er} décembre 1844. Extraits de sa correspondance. Suite et fin. *R. Arch.* xxxii, 1898, pp. 85–115, 286–301.
- Chr. Belger**, Neue Ausgrabungen und Forschungen. Olympieion, Niketempel und Alter Markt in Athen, Dörfeld über das griechische Theater des Vitruv. Poseidontempel in Tomi, Heraion von Samos. *Berl. Phil. W.* January 8, 1898.
- Neuigkeiten aus Athen und Theben. Die Wasserleitung von Athen. Archaische Gräber am Areios Pagos. Die Einteilung des Zuschauerraumes im Theater des Lykurgos. Mykenische Gräber in Theben. *Berl. Phil. W.* February 26, 1898. Neuigkeiten aus Athen, Archaische Gräber am Areios Pagos. Die Einteilung des Zuschauerraumes im Theater des Lykurgos. Die Beleuchtung der Tempel. *Berl. Phil. W.* March 5, 1898. Neuigkeiten aus Athen, Theben, Megara. *Berl. Phil. W.* March 12, 1898.
- O. Benndorf and R. Heberdey**, Vorläufige Berichte über die Ausgrabungen in Ephesus. *Jahreshefte d. Oesterr. Arch. Inst.* I, 1898, Beiblatt, pp. 53–82; 3 figs. (from *Anz. Wiener Akad. phil.-hist.* *Cl.* 1897, No. 5–6, and 1898, No. 7–8).
- Bibliography, *J.H.S.* 1898, I.
- Γ. Μ. Βιζυηνός**, Οἱ καλόγεροι καὶ ἡ λατρεία τοῦ Διονύσου ἐν Θράκῃ. Θρακικὴ Ἐπετηρίς, ἐτησίον δημοσίευμα τῆς ἐν Ἀθήναις Θρακικῆς Ἀδελφότητος, Athens, I, 1897, p. 102.

- J. Boehlau**, Aus ionischen und italischen Nekropolen. Ausgrabungen und Untersuchungen zur Geschichte der nachmykenischen griechischen Kunst. Leipzig, 1898, B. G. Teubner. 3 volumes. Vol. I, 170 pp.; 15 pls.; 1 plan; 17 cuts; supplement. Large 4to.
- S. Bonfigli**, Su l'akropoli akragantina. Girgenti, 1897, S. Montes. 57 pp. 8vo.
- R. C. Bosanquet**, Excavations of the British School at Melos: the Hall of the Mystae. *J.H.S.* 1898, I, pp. 60-80; 3 pls.; 8 cuts.
- L. Boucher**, Excursion artistique en Grèce. *Bulletin de la Société Normande de Géographie*, 1897, No. 4.
- R. Brown, Jr.**, Semitic Influence in Hellenic Mythology. With special reference to recent mythological works of F. Max Müller and Andrew Lang. London, 1898, Williams and Norgate. 242 pp. 8vo.
- The Builder**, N. S., Vol. LXXIV (1898). Part II, Excavations at Delphi, p. 146. Seventeenth century plans of Athens; p. 199. Part IV, Mycenaean tombs at Thebes; p. 397.
- H. Bulle**, Griechische Statuenbasen. Skizze zu einer Entwicklungsgeschichte der antiken Postamentformen. Der philosophischen Fakultät der K. B. Ludwig-Maximilians-Universität zu München als Habilitationsschrift vorgelegt. München, 1898, A. Buchholz. 40 pp. 8vo.
- Ch. Buondelmonti**, Description des îles de l'Archipel. Version grecque par un anonyme, publiée d'après le manuscrit du Sérail, avec une traduction française et un commentaire, par É. Legrand, Part I, 52 geographical maps. Paris, 1897, Leroux. Large 8vo.
- R. M. Burrows**, Pylos and Sphacteria. *J.H.S.* 1898, I, pp. 147-159; 4 pls.; 2 cuts.
- J. B. Bury**, The Double City of Megalopolis. *J.H.S.* 1898, I, pp. 15-22.
- E. Camoreyt**, Études de géographie historique. La ville des Sotiates. Auch, 1897. 150 pp.; cuts. 8vo.
- M. Χρυσόχοῦς**, Γεωγραφικά σημειώματα. α') Ἀμφίπολις; β') Ἡῶν. (Plate.) Φιλολογικὸς Σύλλογος Παισασσός. Ἔτος Β', 1897.
- Joseph T. Clarke**, Report on the Investigations at Assos, 1882, 1883. Part I, with an appendix. Papers of the Archaeological Institute of America. Classical Series. II. Printed at the cost of the Boston Society of Architects. New York, 1898. The Macmillan Company. xvi, 376 pp.; 83 cuts and pls.
- S. M. Columba**, Le origini tessaliche del culto di Asklepios, Palermo.
- A. Conze**, Pergamon. Meeting of the Berlin Archaeological Society, December, 1897. *Arch. Anz.* 1897, pp. 170-187; plan.
— Pro Pergamo. Ein Vortag. Berlin, 1898, G. Reimer. 32 pp. 8vo.
- E. Curtius and F. Adler**, Olympia. Die Ergebnisse der von dem Deutschen Reich veranstalteten Ausgrabung. I. Textband. Topographie und Geschichte von Olympia, von F. Adler, E. Curtius, W. Dörpfeld, P. Graef, J. Partsch, R. Weil. Berlin, 1897, A. Asher & Co. xi, 154 pp. Large 4to. Atlas with maps and plans (12 numbers). Large fol.

- P. Decharme**, Ino Leucothea. *Dictionnaire des Antiq. grecques et romaines*. Ch. Daremberg et Edm. Saglio, avec le concours de E. Pottier, Livr. 25, pp. 525-527; 1 cut.
- E. Deschamps**, Reise auf Cypern, II, *Globus*, 1897, No. 22, pp. 347-351; 6 cuts.
— Reise auf Cypern, III, *Globus*, 1898, No. 13, pp. 202-211; 4 cuts. Concluded, No. 14, pp. 218-222; 8 cuts.
— Au pays d'Aphrodite: Chypre, Carnet d'un voyageur. Paris, 1898, Hachette, 16 pp.; 80 cuts.
- Th. Frantz**, Themistokles und die attische Marine, Eine Flottenfrage im Alterthum. Mannheim, 1898, F. Nemnich. 67 pp. Large 8vo.
- J. G. Frazer**, Pausanias's Description of Greece, translated with a Commentary. London, 1898, Macmillan & Co. 6 Vols. 8vo. New York, The Macmillan Co. \$30. [Vol. I: Introduction, xevi pp.; Translation, 616 pp. Vol. II: Commentary on Bk. I, 582 pp.; 10 pls.; 43 cuts. Vol. III: Commentary on Bks. II-V, 652 pp.; 10 pls.; 79 cuts. Vol. IV: Commentary on Bks. VI-VIII, 447 pp.; 47 cuts; 2 pls. Vol. V: Commentary on Bks. IX, X, Addenda, 638 pp.; 10 pls.; 20 cuts. Vol. VI: Indices; 10 maps; 109 pp. A remarkable work, replete with learning.]
- H. von Fritze**, Συμβολὴ εἰς τὸ τυπικὸν τῆς ἐν Ἐλευσίνι λατρείας. 'Εφ. Ἀρχ. 1897, pp. 163-174; 7 cuts.
- J. Fulleylove**, Pictures of Classic Greek Landscape and Architecture. Text by H. W. Nevinson. London, 1897, Dent. Plates. 94 pp. Sup. roy. 4to.
- V. G.**, Ausgrabungen und Funde [Priene]. *Kunstchron.*, N. F., IX (1897-1898), No. 18; pp. 297 f.
- Greve**, Narkissos, in Ausführliches Lexikon der griechischen und römischen Mythologie, hrsg. von W. H. Roscher, Vol. III, Coll. 10-24. Leipzig, 1898, B. G. Teubner. 2 cuts.
- Jane E. Harrison**, Notes Archaeological and Mythological on Bacchylides. *Cl. R.* 1898, pp. 85-86.
- B. Haussoullier** et **E. Pontremoli**, Fouilles de Didymes. *Revue de l'art ancien et moderne*, I, 1897, pp. 391-404; 7 cuts; 1 pl.
- H. Hautteceur**, L'île de Kythnos (Thermia). *Bull. de la Société Royale Belge de Géographie*, 1897, No. 5, pp. 417-447.
- R. Heberdey**, Die vorjährigen Ausgrabungen in Ephesus. *Anzeiger d. k. k. Akad. der Wiss. in Wien, Phil.-hist. Klasse*, 1898. Nos. vii-viii, pp. 27-39; plan.
- Th. Heldreich**, 'H χλωρίς τῆς Αἰγίνης. (1 plate.) Φιλολογικὸς Σάλλογος Παρνασσός, 'Eros B', 1897.
- Hellenic Society**, Rules; list; proceedings for 1896-1897; proceedings of Cambridge branch, 1896-1897. *J.H.S.* 1897, pp. ix-xlii.
— Additions to library, 1897; list of periodical publications in the library; Catalogue of loan collection of lantern-slides. *J.H.S.* 1897, xlv-lxxviii.
- S. Herrlich**, Epidaurus, eine antike Heilstätte. Program des Humboldt-Gymnasiums zu Berlin, 1898. 32 pp.; 4 pls.
- J. H. Huddilston**, The Attitude of the Greek Tragedians toward Art. x, 120 pp. London and New York, 1898, Macmillan. Crown 8vo.

- C. Humann, C. Cichorius, W. Judeich, F. Winter, Alterthümer von Hierapolis. Viertes Ergänzungsheft zum *Jb. Arch. I.*, Berlin, 1898, G. Reimer. xii, 202 pp.; 61 cuts; one plan of city. 4to.
- J. Stuart Jones, Bacchylides and the Fate of Croesus. *Cl. R.* 1898, p. 84.
- J. Jüthner, Siegerkranz und Siegerbinde. *Jahreshefte d. Oesterr. Arch. Inst. I.* 1898, pp. 42-48; 5 figs.
- E. Kalinka, Mittheilungen aus Constantinopel. *Jahreshefte d. Oesterr. Arch. Inst. I.* 1898, pp. 31-37.
- P. Kavvadias, Report of the Acts of the Greek Archaeological Society in the year 1897 (*Πρακτικά τῆς ἐν Ἀθήναις Ἀρχαιολογικῆς Ἑταιρείας*, 1897, pp. 9-32). [Reports of excavations at Athens, Piræus, Sunium, Eleusis, Thebes, Thermum, Eretria, the Cyclades, Mycenæ, Epidaurus, and Lycosura, and of restorations of the Parthenon and the monastery at Daphne. The special reports are by those in charge of the work.]
- Lennart Kjellberg, Asklepios; Mythologisch-archäologische Studien, II. Beiträge zur Kenntniss der Darstellungen des Asklepios in der griechischen Kunst. Extr. from *Språkvetenskaplige Sällskapets förhandl. 1894-1897 i Upsala Universitets Årsskrift.* 43 pp.; 2 pls.; 4 figs. in the text.
- G. Knaack, Hero and Leander. Festgabe für Franz Susemihl. Zur Geschichte griechischer Wissenschaft und Dichtung, pp. 46-82. Leipzig, 1898, B. G. Teubner. 93 pp. 8vo.
- F. Koepp, Zu den Institutsschriften. P. Trémaux' Exploration archéologique en Asie Mineure. *Arch. Anz.* 1898, II, pp. 146 f.
- K. Kourouniotes, Report on Excavations at Eretria. *Πρακτικά τῆς ἐν Ἀθ. Ἀρχ. Ἑτ.* 1897, pp. 21-23.
- Γ. Λαμπουριάδης, περὶ Ἐβρυζελιδος Θρακῶν βασιλέως. Θρακικὴ Ἑπετηρίς, ἐτῆσιον δημοσίευμα τῆς ἐν Ἀθήναις Θρακικῆς Ἀδελφότητος, I, Athens, 1897, p. 153.
- Σπ. Π. Λάμπρος, Δύο ἐκθέσεις περὶ Ἀθηνῶν περὶ τὰ τέλη τοῦ δεκάτου ἐβδόμου αἰῶνος. Δελτίον τῆς ιστορικῆς καὶ ἐθνολογικῆς Ἑταιρείας τῆς Ἑλλάδος, V, 2, p. 219.
- Ἡ περὶ Πελοποννήσου ἔκθεσις τοῦ Βενετοῦ, προνοητοῦ Γραδενίγου. Δελτίον τῆς ιστορικῆς καὶ ἐθνολογικῆς Ἑταιρείας τῆς Ἑλλάδος, V, 2, p. 228.
- Notes from Athens. *Athen.* March 5, March 26, June 11, 1898.
- Tavia, eine verkannte mittelgriechische Stadt. *Byzantinische Zeitschrift*, Vol. VII, 1898, pp. 300-315.
- Ch. Laroche, La Crète ancienne et moderne. Paris, 1898, H. May. 18mo; 70 cuts.
- Henri Lechat, Bulletin Archéologique. *R. Ét. Gr.* 1898, pp. 159-231; 25 cuts. [A report of recent discoveries and discussions, with original comments.]
- Ch. Lécrivain, Le droit de se faire justice soi-même et les représailles dans les relations internationales de la Grèce. *Mémoires de l'Académie des Sciences, Inscriptions et Belles-Lettres de Toulouse*, IX^e Série, Vol. IX, 1897, pp. 277-290.
- N. Lewy, Sabbe-Sambethe [on Paus. X. 12, 9]. *Philologus*, Vol. LVII (N. F. XI), 1898, pp. 350 ff.

- A. Ludwig, Bemerkungen zu den Inschriften der ilischen Tafeln und zu Bakchylides. Anhang von O. Rossbach. Program der Universität Königsberg. Königsberg, 1898, Akad. Buchh. Schubert & Seidel. 13 pp. 4to.
- E. Martini, La Vita dei Greci. Milan, 1897. 159 pp. 16mo.
- J. R. Mélida, Historia del Arte Griego. Madrid, 1897, La España Editorial. 280 pp. 8vo. 100 cuts.
- Michon, On a Greek Bit from Thespieae. *B. Soc. Ant. Fr.* 1897, pp. 280-290; cut.
- M. Moléik, Sketches of Travel from the Old and the New Peloponnesus. Prag, 1898, Otto. [Bohemian.]
- G. Nicolaides, Report of Excavations at the Olympieum in Athens. Πρακτικά τῆς ἐν Ἀθ. Ἀρχ. 'Ετ. 1897, pp. 14-15.
- H. Omont, Athènes au XVIII^e siècle. Dessins des sculptures du Parthénon attribués à J. Carrey et conservés à la Bibliothèque Nationale, accompagnés de vues et plans d'Athènes et de l'Acropole. Paris, 1898, E. Leroux. 24 pp.; 26 pls.; 8 cuts.
- A. Oppel, Die Insel Samos. *Globus*, Vol. LXXIII, 1898, pp. 132 ff.
- X. Ἀ. Παπαδόπουλος, Κεραμεύς, Συμπλήρωμα τῆς Διονυσίου συλλογῆς τῶν Θρακικῶν ἀρχαιοτήτων καὶ ἐπιγραφῶν. Θρακικὴ Ἑπετηρίς, 1897, p. 5.
— Μάδυτος, ἡ πόλις τῆς Θρακικῆς Χερσονήσου κατὰ τοὺς Βυζαντινοὺς χρόνους. Θρακικὴ Ἑπετηρίς, 1897, p. 35.
- P. Paris, Bulletin archéologique de la religion grecque (décembre 1894-décembre 1895). *R. hist. d. Rel. (Annales du Musée Guimet)*, dix-septième année, XXXIII, 1896, pp. 54-83.
- Where Paul preached in Corinth. *Independent*, May 5, 1898. [The discovery of the synagogue of the Hebrews at Corinth.]
- G. Perrot et Ch. Chipiez, Histoire de l'art dans l'antiquité. Tome VII. La Grèce de l'épopée, la Grèce archaïque (le temple). Contenant 50 planches et 300 gravures. Livr. I. Paris, Hachette.
- D. Philios, Προϊστορικοὶ τάφοι παρὰ τὰς Θήβας. Πρακτικά τῆς ἐν Ἀθ. Ἀρχ. 'Ετ. 1897, pp. 94-104.
- R. Pohlmann, Die soziale Dichtung der Griechen. II. *Neue Jahrbücher für das klassische Altertum, Geschichte und deutsche Litteratur und für Pädagogik*, hrsg. von J. Ilberg und R. Richter. Erster Jahrgang, 1898, pp. 88-104.
- Pomtow, Die Ausgrabungen in Delphi. Berlin Arch. Soc., January, 1898. *Arch. Anz.* 1898, I, pp. 39-47.
- Pothier, On an Ancient Greek Bit from Corinth. *B. Soc. Ant. Fr.* 1897, pp. 285-289; cut.
- G. Radet, L'histoire et l'œuvre de l'École française d'Athènes. Paris, 1898. 8vo.
- Salomon Reinach, Les Cabires et Mélécerte. *R. Arch.* XXXII, 1898, pp. 56-61.
- Rufus B. Richardson, The Excavations at Corinth. *Independent*, June 9, 1898.
— The Excavations at Corinth in 1898: Preliminary Report. *Am. J. Arch.* Second Series, II, 1898, pp. 233-236; 3 pls.; 1 plan.

- Rufus B. Richardson**, The Semicentennial of the French School at Athens. *Independent*, June 23, 1898.
- Aetolia and Akarnania. *Independent*, June 2, 1898.
- The Discovery of Pirene. *Nation*, June 9, 1898; *Evening Post*, June 9, 1898.
- C. Robert**, Theseus und Meleagros bei Bacchylides. *Hermes*, XXXIII, 1898, pp. 130-159; cut.
- E. Rohde**, Psyche. Seelencult und Unsterblichkeitsglaube der Griechen. 2d edition. Freiburg i. Br., 1898, J. C. B. Mohr. 2 vols. 8vo. Vol. I: vii, 329 pp.; Vol. II: iii, 436 pp.
- W. H. Roscher**, Die "Hundekrankheit" (κύων) der Pandareostöchter, und andere mythische Krankheiten. *Rheinisches Museum für Philologie*, N. F., Vol. 53, 1898, pp. 169-204.
- Über den gegenwärtigen Stand der Forschung auf dem Gebiete der griechischen Mythologie und die Bedeutung des Pan. *Archiv für Religionswissenschaft*, Vol. I, 1898, pp. 43-60.
- O. Rossbach**, Nemesis, Ausführliches Lexikon der griechischen und römischen Mythologie, hrsg. von W. H. Roscher, Vol. III, coll. 117-160; 6 cuts. Leipzig, 1898, B. G. Teubner.
- J. Rouvier**, Letter on Graves found at Laodicea in Canaan. *C. R. Acad. Insc.* 1898, p. 18.
- A. Salinas**, Nuove cretule selinuntine. *Not. Scavi*, 1898, p. 224.
- B. Sauer**, Bendis. *Münchener Allgemeine Zeitung*, 1897, No. 230, Beilage.
- Schrader**, Priene. Meeting of the Berlin Archaeological Society, December, 1897. *Arch. Anz.* 1897, pp. 170-187; plan.
- R. Schubert**, Der Tod des Kleitos. *Rheinisches Museum für Philologie*, N. F., Vol. 53, 1898, pp. 98-120.
- A. N. Σκιας**, Ἀρχαῖοι τάφοι ἐν Θερμοπύλαις, Φιλολογικὸς Σέλλογος Παρνασσός. "Ερος β', 1897.
- Ἀνασκαφαὶ παρὰ τὸν Ἰλισόν. Πρακτικὰ τῆς ἐν Ἀθ. Ἀρχ. Ἐτ. 1897, pp. 73-85; pl.
- Περὶ τῆς ἐν Ἐλευσίνι ἀνασκαφῆς. Πρακτικὰ τῆς ἐν Ἀθ. Ἀρχ. Ἐτ. 1897, pp. 86-93. Appendix, *ibid.* pp. 105-107.
- G. Soteriades**, Report on Excavations at the Asclepieum in Athens. Πρακτικὰ τῆς ἐν Ἀθ. Ἀρχ. Ἐτ. 1897, pp. 12-14. Report on Excavations at Thermum in Aetolia, *ibid.* pp. 18-21.
- B. Staes**, Report of Excavations at Sunium. Πρακτικὰ τῆς ἐν Ἀθ. Ἀρχ. Ἐτ. 1897, pp. 16-18.
- Stahlecker**, Ueber die verschiedenen Versuche der Rekonstruktion der attischen Triere. Program des Gymnasiums zu Ravensburg. 1897.
- A. Trendelenburg**, Bendis. Berlin, 1898, B. Gaertner. 23 pp.; 1 pl. 4to.
- Teilnahme des Bacchus am Gigantenkampf nach Hor. Car. II, 19. (Berlin Arch. Soc. Apr. 1898.) *Arch. Anz.* 1898, II, pp. 127 f.; 1 cut.
- Chr. Tsountas**, Μῆτραι καὶ ἐξέφη ἐκ Μυκηνῶν. Ἐφ. Ἀρχ. 1897, pp. 97-128, pls. 7, 8; 2 cuts. (Addendum, p. 200.)

- Chr. Tsountas**, Report on Excavations in the Cyclades, especially Paros. (Πρακτικά τῆς ἐν Ἀθ. Ἀρχ. Ἐτ. 1897, pp. 23-24.) Report on Excavations, etc., at Mycenae, *ibid.* pp. 24-27.
- A. W. Verrall**, Death and the Horse. *J.H.S.* 1898, pp. 1-14.
- G. Weber**, Die Hochdruckwasserleitung von Laodicea ad Lycum. *Jb. Arch. I.* 1898, pp. 1-13; 1 pl.; 19 cuts.
- W. Weinberger**, Zur Philostrate-Frage. *Philologus*, Vol. LVII (N. F. XI), 1898, pp. 335-337.
- Weizsäcker**, Neleus, Ausführliches Lexikon der griechischen und römischen Mythologie, hrsg. von W. H. Roscher, Vol. III, coll. 104-113; 3 cuts. Leipzig, 1898, B. G. Teubner.
- Wörner**, Nausikaa, in Ausführliches Lexikon der griechischen und römischen Mythologie, hrsg. von W. H. Roscher, Vol. III, coll. 28-41; 2 cuts. Leipzig, 1898, B. G. Teubner.
- W. J. Woodhouse**, Aetolia. Its Geography, Topography, and Antiquities. Oxford, 1897, Clarendon Press. xvi, 398 pp. Large 8vo. Numerous cuts and maps.
- The Greeks at Plataiai. *J.H.S.* 1898, pp. 33-59; 1 plan.

II. GREEK ARCHITECTURE

- E. Ardillon**, Quomodo Graecae collocaverint portus atque aedificaverint. Thesim facultati litterarum Parisiensi proponebat E. A. Lille, 1898, Le Bigot. 79 pp. 8vo.
- A. Fossum**, The *Eiskyktema* in the Eretrian Theatre. *Am. J. Arch.* Second Series, II, 1898, pp. 187-194; 3 pls.; 3 figs.
- Herrlich**, Die Tholos von Epidauros. (Berlin Arch. Soc. March, 1898.) *Arch. Anz.* 1898, II, p. 123.
- F. Hiller v. Gaertringen**, Die Erbauungszeit des Niketempels. *Arch. Anz.* 1898, II, p. 124.
- F. Groh**, Beiträge zur Geschichte des griechischen Theaters. *Listy filologické*, XXIV, 1897, pp. 413-421. [Bohemian.]
- P. Kavvadias**, Περὶ τοῦ ναοῦ τῆς Ἀπτερόν Νίκης κατ' ἐπιγραφήν ἐκ τῆς Ἀκροπόλεως. Ἐφ. Ἀρχ. 1897, pp. 173-194; pl. 11.
- G. Körte**, Der "alte Tempel" und das Hekatompedon auf der Akropolis zu Athen. *Rheinisches Museum*, 1898, pp. 239-263 [with excursus: Die Hekatompedon-Inschrift, pp. 264-269].
- M. Laurent**, Le théâtre grec d'après les recherches de MM. Dörpfeld et Reisch. *Revue de l'instruction publique en Belgique*, Vol. XL, 1898, pp. 95-105.
- E. Loewy**, Il teatro greco secondo gli studi recenti. *Atene e Roma*, May-June, 1898, pp. 113-139; 9 figs. [A summary of Dörpfeld's views.]
- F. Noack**, Das Theater der Griechen. *Westermanns illustrierte deutsche Monatshefte*, LXXXIII, 1898, pp. 629-639; 6 cuts.

- Ch. Normand**, Un ornement grec inédit, décoration de la métope d'ordre extérieur de la tholos d'Iéon d'Epidaure. *L'ami d. Mon.* Vol. XI, 1897, p. 332; pl.
- Die Wiederherstellung des Parthenon.** *Berl. Phil. W.* April 23, 1898. [Extract from the *Reichsanzeiger*.]

III. GREEK SCULPTURE

- W. Amelung**, Dell' arte Alessandrina a proposito di due teste rinvenute in Roma. *B. Com. Roma*, 1897, pp. 110-142; 2 pls.; 13 cuts.
- P. Arndt**, Ein antikes Köpfchen aus dem Besitze von Dr. Julius Naue. *Zeitschrift des Münchener Alterthumsvereins*, N. F. VIII, 1896-1897, pp. 1-3; 1 pl.; 3 cuts.
- La Glyptothèque Ny-Carlsberg fondée par C. Jacobsen. Les Monuments antiques. Munich, 1898, F. Bruckmann. Livr. IV. Text, pp. 33-54; 17 cuts. Pl. 21. Statue de jeune homme. Pl. 22. Tête et côté postérieure de la statue pl. 21. Pl. 23, 24. Tête de jeune homme. Pl. 25. Torse d'Apollon. Pl. 26. Statue d'Anakréon. Pl. 27, 28. Tête de la statue pl. 26. Pl. 31, 32. Tête de femme. Livr. V. Text, pp. 55-70; 9 cuts. Pl. 33. Statue d'Apollon. Pl. 34. Tête d'Apollon. Pl. 35. Tête féminine. Pl. 36. Tête de jeune homme. Fragment de tête virile. Pl. 37. Deux fragments d'un relief. Pl. 38. Statue féminine. Pl. 39-40. Tête de la statue pl. 38. Pl. 41, 42. Tête colossale d'Athéné.
- O. Benndorf**, Bildnis einer jungen Griechin. *Jahreshefte d. Oesterr. Arch. Inst.* I, 1898, pp. 1-8; pl. i; 4 figs. [Sculpture of the fourth century a.c., perhaps from Epidamnus.]
- H. Bulle**, Ein antikes weibliches Köpfchen aus dem Besitze der Frau Geheimrath Luise von Hecker. *Zeitschrift des Münchener Alterthumsvereins*, N. F. VIII, 1896-1897, p. 4; 1 pl.
- Drei griechische Thonstatuetten. *Zeitschrift des Münchener Alterthumsvereins*, N. F. IX, 1898, pp. 22-25; 3 cuts.
- Ein Bildniss des Euripides. *Zeitschrift des Münchener Alterthumsvereins*, N. F. VIII, 1896-1897, pp. 13-15; 5 cuts.
- M. Collignon**, Geschichte der griechischen Plastik. 2. Concluding vol.: Der Einfluss der grossen Meister des 5. Jahrh.—Das 4. Jahrh.—Die hellenistische Zeit.—Die griechische Kunst unter römischer Herrschaft. Deutsch von F. Baumgarten. Strasburg, 1897, K. J. Trübner. x, 763 pp.; 12 pls.; 377 cuts. Lex. 8vo.
- Louis Couve**, Note sur une statue d'homme trouvée à Délos. *R. Arch.* XXXII, 1898, pp. 14-19; pl. ii; cut.
- C. van R. Dearth**, An Artistic Treasure from Spain. The Lately Discovered Bust of Elche in the Louvre. *The Century*, July, 1898, pp. 436-438; photograph.
- E. A. Gardner**, A Head in the Possession of Philip Nelson, Esq., M. B. *J.H.S.* 1898, I, pp. 141-146; 1 pl.
- G. Habich**, Hermes Diskobolos. *Jb. Arch.* I. 1898, II, pp. 57-65; 3 cuts.

- P. Jamot, Le buste d'Elché. *Gaz. B.-A.* 1898, pp. 239-250; 2 cuts; 1 pl.
- W. Klein, Praxiteles. Leipzig, 1898, Veit & Co. 448 pp.; 94 cuts. Lex. 8vo.
- Kubitschek, Eine Marsyas-Statue in Cremna (Pisidien). *Arch.-Ep. Mitth.* 1897, pp. 151-154; 1 cut.
- Lafaye, On a Bronze Statuette of Venus from Tripolis in Syria. *B. Soc. Ant. Fr.* 1897, pp. 264-269. [Is derived from the Ἀφροδίτη ψελλουμένη of Praxiteles.]
- H. Lehner, Gigantenreiter mit Keule. *Westdeutsche Zeitschrift für Geschichte und Kunst*, 1897, pp. 296-299; pl. 21, 1.
- L. Mariani, Statue muliebri vestite di peplo. *B. Com. Roma*, 1897, pp. 169-195; 3 pls.; 13 cuts.
- J. R. Mélida, Busto anteromano descubierto en Elche. *Boletín de la Real Acad. de la Historia*, Madrid, 1897, pp. 427-435; pl.
- Busto anteromano descubierto en Elche. *Revista de la Asociación artistico-arqueológica Barcelonesa*, II, 1898, pp. 493-498.
- Figura de Centauro bronce griego arcaico procedente de Rollos. (Murcia). *Revista de archivos, bibliotecas y museos. Tercera época*, I, 1897, pp. 513-516; pls. xvii-xviii.
- Das Museum, Jahrgang III. No. 1, Praying Boy in Berlin; No. 2, F. Winter, Griechische Thonfiguren aus Tanagra, pl. 13 (seated girl, figurine in the Berlin Museum); 5 cuts (an Attic vase and terra-cotta figures); No. 3, Apollo of the Belvedere, pl. 22; No. 4, Amazonomachia, from the Mausoleum at Halicarnassus, pl. 30; No. 5, the Eleusinian Relief, pl. 38; No. 6, Marsyas by Myron, pl. 46; No. 7, Bust of Pericles in the British Museum, pl. 53.
- P. Paris, Buste espagnol de style gréco-asiatique, trouvé à Elché (Musée du Louvre). Paris, 1898. 32 pp.; 2 pls. 4to. [Extr. from *Monuments et Mémoires* de la fondation Eug. Piot, Vol. IV, No. 2.]
- Le buste d'Elché au Musée du Louvre. *Revue de l'Art ancien et moderne*. 2^e Année, Vol. III, 1898, pp. 193-202; pl.; 6 cuts.
- Bronzes espagnols de style gréco-asiatiques. *R. Arch.* XXXII, 1898, pp. 203-212; 6 cuts.
- Paul Perdrizet, Note généalogique sur la famille de Praxitèle. *R. Ét. gr.* 1898, pp. 82-95.
- E. Petersen, Der Faustkämpfer des Thermenmuseums. *Röm. Mitth.* 1898, pp. 93-95.
- Δ. Φάιος, Ἀθηνᾶς κεφαλὴ ἐξ Ἐλευσίνος. (1 Plate.) Φιλολογικὸς Σύλλογος Παιδασσός. Ἔτος β', 1897.
- J. Pickard, The Orpheus Relief. *Am. J. Arch.* Second Series, II, 1898, pp. 169-172.
- Salomon Reinach, Statues antiques des Musées de Compiègne et de Nevers. *R. Arch.* XXXII, 1898, pp. 161-168; pls. iii, iv, v.
- Théodore Reinach, La tête d'Elché au Musée du Louvre. *R. Ét. gr.* 1898, pp. 39-60; pl.
- E. Reisch, Athene Hephaistia. *Jahreshefte d. Oesterr. Arch. Inst.* I, 1898, pp. 55-93; pl. iii; 7 figs.

- R. B. Richardson**, A Trace of Egypt in Eleusis. *Am. J. Arch.* Second Series, II, 1898, pp. 223-232; pl. [The Ram's head from Eleusis.]
 — Terra-Cotta Figurines from Corinth. *Ibid.* pp. 207-222; 33 cuts.
- A. de Ridder**, Catalogue des bronzes trouvés sur l'Acropole d'Athènes. Publié sous les auspices de l'Académie des Inscriptions et Belles-Lettres (Fondation Piot), Deuxième partie, Paris, A. Fontemoing. 7 pls.; 130 cuts.
- C. Robert**, Die Knöchelspielerinnen des Alexandros. Nebst Excursen über die Reliefs an der Basis der Nemesis von Rhammus und über eine weibliche Statue der Sammlung Jacobsen. Einundzwanzigstes hallisches Winkelmannsprogramm. Halle a. S., 1897, M. Niemeyer. 34 pp.; 1 pl.; 8 cuts. 4to.
- Satyr mit den Horen, antikes Marmorrelief des Kallimachos, Rom, Kapitolisches Museum. *Zeitschrift des Münchener Alterthumsvereins*, N. F. VIII, 1896-97; p. 15. [Illustration only.]
- H. Schmidt**, Mykenische Thonidole. (Berlin Arch. Soc. April, 1898.) *Arch. Anz.* 1898, II, pp. 125 f.
- Eugénie Sellers**, L'Hermès d'Olympie. *Gaz. B.-A.* 1897, pp. 119-139; 1 pl.; cuts. [The Hermes probably not by Praxiteles, but by Cephisodotus.]
- J. Six**, Ikonographische Studien. XI. Homeros; XII. Seleukos; XIII. Perseus König von Makedonien. *Röm. Mitth.* 1898, pp. 60-78; 6 figs.
- G. Sixt**, Fahrender Juppiter mit Giganten. *Westdeutsche Zeitschrift für Geschichte und Kunst*, 1897, pp. 293-296; 2 cuts.
- H. S. Washington**, On the Identification of Marbles in Greek Sculpture. *Am. J. Arch.* Second Series, II, 1898, pp. 1-18; 4 cuts.
- K. Wernicke**, Olympische Beiträge. VI, Der Ostgiebel des Zeustempels. *Jb. Arch. I.* 1897, pp. 169-194; 14 cuts.
- J. F. White**, Note on Some Attic Stelai. *J.H.S.* 1898, I, pp. 133-135.
- F. Winter**, Griechische Thonfiguren aus Tanagra. *Das Museum*, III, No. 2; pl. xiii; 5 cuts.
- C. Wunderer**, Der Faust-Kämpfer im Museo delle Terme. *Philologus*, LVII, (N. F. XI), 1898, pp. 1-7.
- J. Zingerle**, Cultbild der Nemesis. *Arch.-Ep. Mitth.* 1897, pp. 228-232; 2 cuts.

IV. GREEK VASES AND PAINTING

- Louis Couve**, Un lécythe inédit du Musée du Louvre. *R. Arch.* XXXII, 1898, pp. 213-234; 3 cuts.
- E. A. Gardner**, A Catalogue of the Greek Vases in the Fitzwilliam Museum. Cambridge, 1897, Cambridge University Press. xxi, 94 pp.; 41 pls. Imp. 8vo.
- P. Gardner**, Boreas and Oreithyia on a Late Attic Vase. *J.H.S.* 1898, pp. 136-140; 1 pl.; 1 cut.
- B. Graef**, Die Zeit der Kodrosschale. *Jb. Arch. I.* 1898, II, pp. 65-73; 4 pls.; 3 cuts.
- P. Hartwig**, 'Επίτηρον ἐξ 'Εσπερίας. 'Εφ. 'Αρχ. 1897, pp. 129-142; pls. 9, 10.

- W. Helbig, Les Vases du Dipylon et les Naucreries. Paris, 1898, Klincksieck. 39 pp.; cuts. 4to. (*Mémoires de l'Acad. Insc.* Vol. 30, Part I.)
- Eine Heerschau des Peisistratos oder Hippias auf einer Schwarzfigurigen Schale. *Sitzungsber. Mün. Akad.* II, 1897, pp. 259–320.
- J. C. Hoppin, The Argive Exclusion of Attic Pottery. *Cl. R.* 1898, pp. 86–87.
- J. H. Huddilston, Greek Tragedy in the Light of Vase Paintings. 202 pp. London and New York, 1898, Macmillan. Crown 8vo.
- G. Knaack, Ein angebliches Gemälde des Apelles. *Philologus*, Vol. LVII (N. F. XI), 1898, pp. 338 f.
- J. Momméja, La céramique grecque dans le Bas-Quercy. *Bull. de la Société des études littéraires, scientifiques et artistiques du Lot.* 1897, No. 2.
- J. L. Myres, Textile Impressions on an Early Clay Vessel from Amorgos. *Journal of the Anthropological Institute of Great Britain and Ireland*, pp. 178–180; pl. xii.
- On a Greek Phiale with Gigantomachia. *Athen.* March 5, 1898, p. 317.
- L. Pollak, Neue Beiträge zu den Meistersignaturen und Lieblingsinschriften. *Röm. Mitth.* 1898, pp. 79–89; pl. iv; fig.
- E. Pottier, La peinture industrielle chez les Grecs. Paris, 1898, H. May. 64 pp. 8vo.
- W. Reichel, Zum Stierfänger von Tiryns. *Jahreshefte d. Oesterr. Arch. Inst.* I, 1898, pp. 13–17; fig.
- R. B. Richardson, An Old Corinthian Vase [Celebe] from Corinth. *Am. J. Arch.* Second Series, II, 1898, pp. 195–206; 2 pls. (colored); 1 fig.
- S. Wide, Altgriechische Vase im Nationalmuseum zu Stockholm. *Jb. Arch. I.* 1897, IV, pp. 195–199; 1 pl.; 3 cuts.
- C. Waldstein and J. C. Hoppin, Terra-cotta Reliefs from the Argive Heraeum. *Am. J. Arch.* Second Series, II, 1898, pp. 173–186; 2 pls.
- F. Winter, Iliupersis auf einem Thonbecher im Antiquarium zu Berlin. *Jb. Arch. I.* 1898, II, pp. 80–85; pl. 5; 1 cut.
- P. Wolters, Vasen aus Menidi. *Jb. Arch. I.* 1898, I, pp. 13–28; 1 pl.; 4 cuts.

V. GREEK INSCRIPTIONS

- T. K. Abbott, On a Greek Inscription. *Hermathena*, No. XXIII, p. 109.
- E. B., Inscription de Mylasa relative à la monnaie. *R. Num.* 1898, pp. 129–131.
- Ph. Berger, Report on Inscriptions from Palmyra. *C. R. Acad. Insc.* 1898, p. 157.
- On Amphorae with *graffiti* from Beyrouth. *C. R. Acad. Insc.* 1898, p. 158.
- E. F. Bischoff, Zum rhodischen Kalender. *Neue Jahrbücher für Philologie und Pädagogik* (Fleckeisen's Jahrbücher), Vol. 155, 1897, pp. 730 f.
- J. B. Bury, The Base of the Polykalos Bronze. *Cl. R.* 1898, p. 142.
- H. Collitz, F. Bechtel, Sammlung der griechischen Dialekt-Inschriften. Band III, 2te Hälfte; R. Meister, Die Inschriften von Lakonien, Tarent, Herakleia (am Siris) und Messenien. Göttingen, 1898, Vandenhoeck und Rupprecht. 146 pp. 8vo.

- R. Dareste, B. Haussoullier, Th. Reinach**, Recueil des inscriptions juridiques grecques. Deuxième Série. Livr. I. Paris, 1898, E. Leroux. v, 177 pp. Large 8vo.
- Dragoumés**, 'Επιγραφικά φρονίσματα. *Athen. Mitth.* XXII, 1897, pp. 381-386.
- Th. Gomperz**, Zur philosophischen Inschrift von Oenoanda. *Arch.-Ep. Mitth.* XX, 1897, pp. 171 f.
- F. Halbherr**, Addenda to the Cretan Inscriptions. *Am. J. Arch.* Second Series, II, 1898, pp. 79-94.
- H. R. Hall**, Greek Inscriptions from Egypt. *Cl. R.* 1898, pp. 274-282.
- E. Hula**, Metagraphie attischer Kaiserinschriften. *Jahreshefte d. Oesterr. Arch. Inst.* I, 1898, pp. 27-30.
- Inscriptions from Asia Minor. *Athen. Mitth.* XXII, 1897, pp. 480-486, among the "Funde."
- Jelić**, Tre nuovi frammenti d' iscrizione greche dalla Dalmazia. *Bull. di Arch. e Storia Dalmata*, 1897, pp. 183-191.
- P. Kavvadias**, 'Αγωνιστικὴ 'Επιγραφή ἐκ Χαλκίδος. 'Εφ. 'Αρχ. 1897, pp. 195-200.
- K. Kourouniotes**, 'Επιγραφαὶ 'Ερετρίας. 'Εφ. 'Αρχ. 1897, pp. 143-164.
- 'Επιγραφαὶ ἀνέκδοτοι ἐκ Θράκης. Θρακικὴ 'Επετηρίς, ἐτήσιον δημοσίευμα τῆς ἐν 'Αθήναις Θρακικῆς 'Αδελφότητος, I, Athens, 1897, p. 290.
- Ch. Michel**, Recueil d'inscriptions grecques. Part III. Brussels, 1898, Lamartin.
- J. A. R. Munro**, Inscriptions from Mysia. *J.H.S.* 1897, pp. 268-293.
- A. Nikitskij**, The Delphic Labyadae. *Journal of the Ministry of Public Instruction*, department of classical philology, 1898, pp. 42-80. [Russian.]
- P. N. Papageorgiou**, Ein Pergamenischer Siegelring. *Berl. Phil. W.* April 9, 1898.
- Ein Pergamenischer (?) Cameo. *Berl. Phil. W.* February 19, 1898.
- H. Pomtow**, Fasti Delphici II. *Neue Jahrbücher für Philologie und Pädagogik* (Fleckeisen's Jahrbücher), Vol. 155, 1897, pp. 737-765.
- Salomon Reinach**, Remarks on the Inscription relating to the Temple of Athena Nike. *C. R. Acad. Insc.* 1897, pp. 548-552. [The text of the inscription and a letter from P. Kavvadias.]
- S. Ricci**, Notizie di epigrafia greca. *Atene e Roma*, Anno I, 1898, No. 2 (marzo-aprile), pp. 92-95.
- G. C. Richards**, A Re-discovered Inscription in the Acropolis Wall. *Cl. R.* 1898, p. 233.
- O. Rossbach**, Grabinschrift von Syrakus. *Berl. Phil. W.* March 19, 1898.
- ΗΔΥΣ · ΘΡΑΙΚΙΔΗΣ [zu Plin. XXXIII, 156]. *Rheinisches Museum für Philologie*, N. F., Vol. 53, 1898, pp. 167 f.
- Fr. P. Séjourné**, Inscriptions grecques du Hauran. *Revue biblique*, VII, 1898, pp. 97-110; 17 cuts.
- E. Szanto**, Zur Geschichte von Troezen. *Arch.-Ep. Mitth.* 1897, pp. 41-45.
- Ueber die Griechische Hypothek. *Arch.-Ep. Mitth.* 1897, pp. 101-114.

- M. de Vogüé**, On Documents brought from Petra by Father Lagrange. *C. R. Acad. Insc.* 1897, pp. 699 f.
- A. Wilhelm**, Epigraphische Studien. *Anzeiger der Kais. Acad. der Wissenschaften in Wien*, 1897, pp. 178-188.
- Epigraphischer Bericht aus Griechenland. *Jahreshefte d. Oesterr. Arch. Inst.* I, 1898, *Beiblatt*, pp. 41-50 (from *Anzeiger d. Wiener Akad.* 1897, No. 26).
- Zu griechischen Inschriften. *Arch.-Ep. Mitth.* 1897, pp. 50-96.
- Eine verschleppte Inschrift. *Arch.-Ep. Mitth.* 1897, pp. 96 f.
- Zum Tempelbau der Alkmeoniden. *Arch.-Ep. Mitth.* 1897, pp. 97-100.
- S. A. Xanthoudides**, Inscriptions from Gortyna, Lyttos, and Lató pros Kamara. *Am. J. Arch.* Second Series, II, 1898, pp. 71-78.
- Ziebarth**, Cyriaci Aneonitani inscriptiones Graecae vel ineditae vel emendatae. *Athen. Mitth.* XXII, 1897, pp. 405-414.

VI. GREEK COINS

- E. Babelon**, The Waddington Collection in the Cabinet des Médailles. [Inventory.] Lycia, Pamphylia, Pisidia. *R. Num.* 1898, pp. 1-70.
- Géatas, roi des Édoniens. Διέθνῃς Ἐφημερίς τῆς νομισματικῆς ἀρχαιολογίας, *Journal international d'archéologie numismatique*, Tome I, 1898, pp. 1-10; pl. i.
- A. Blanchet**, Les monnaies antiques de la Sicile. *Revue de l'art ancien et moderne*, 2^e année, T. III, 1898, pp. 117-122; 11 cuts.
- J. A. Blanchet**, Les monnaies en or d'Alexandria Troas. *Revue belge de numismatique*, LIV, 1898, pp. 5-9; 2 cuts.
- J. Dutilh**, Monnaies alexandrines et terres cuites du Fayoum. *Bulletin de l'Institut égyptien* (de Caire), 1896, pp. 103-106; pl.
- Signes astronomiques, divinités, symboles relevés sur les monnaies alexandrines et confirmés par des monuments divers. *B. de l'Institut égyptien* (de Caire), 1896, pp. 211-217.
- W. Greenwell**, On Some Rare Greek Coins. *Num. Chron.* 1897, pp. 253-283; pls. xi-xiv.
- G. F. Hill**, Solon's Reform of the Attic Standard. *Num. Chron.* 1897, pp. 284-292.
- Cartimandua. *Num. Chron.* 1897, pp. 293-301; pl. xiv.
- F. Imhoof-Blumer**, Bithynische Münzen. Διέθνῃς Ἐφημερίς τῆς νομισματικῆς ἀρχαιολογίας, *Journal international d'archéologie numismatique*, Tome I, 1898, pp. 11-44; pl. ii.
- K. F. Kinch**, Le prix d'Achéloos. *R. Num.* 1898, pp. 71-76; 1 cut.
- Δ. Ν. Παρχαλῶς**, Νομισματικὴ τῆς ἀρχαίας Ἀνδρον. (Ἡ φωνὴ τῆς Ἀνδρον, ἔτος β', Nos. 64-75, 22 Μαΐου-22 Αὐγούστου, 1896.)
- Paul Perdrizet**, Sur un Tétradrachme de Nabis. *Num. Chron.* 1898, pp. 1-7.
- Th. Reinach**, Une crise monétaire à Mylasa. *Nouvelle Revue historique de droit français et étranger*, 1898, No. 1, pp. 5-26.

- H. Riggaur, Zur kleinasiatischen Münzkunde. *Sitzungsber. Mün. Acad.* 1897, Heft 3, pp. 523-533; 5 cuts.
- J. Rouvier, Du monnayage alexandrin d'Aradus aux II^e et III^e siècles avant l'ère chrétienne. *C. R. Acad. Insc.* 1898, pp. 207-208 (abstract by E. Babelon).
- † I. N. Σβορώνος, Τὰ χαλκὰ εἰσιτήρια τοῦ Ἀνκουργείου Διονυσιακοῦ Θεάτρου καὶ τῆς Κλεισθενείου Ἐκκλησίας. Διέθνῃς Ἑφημερίς τῆς νομισματικῆς ἀρχαιολογίας. *Journal international d'archéologie numismatique*, Tome I, 1898, pp. 45-120; pls. iii-vi; 2 supplements; 4 cuts.

ROMAN

(Including also titles of works relating to the monuments of the Etruscans and other peoples who inhabited Italy before or contemporaneously with the Romans as well as to Roman monuments outside of Italy.)

I. GENERAL AND MISCELLANEOUS

- Alsius, La Vall de Maria, descubrimientos arqueológicos. *Revista de la Asociación artístico-arqueológica Barcelonesa*, II, 1898, pp. 483-487.
- Anthes, Hessen: Fortsetzung zu No. 167. *Limesblatt*, 1898, pp. 738-740.
- Antoine, Ce que mangeaient les Romains (Suite). *Mémoires de l'Académie des Sciences. Inscriptions et Belles-Lettres de Toulouse*. IX^e Série, Vol. IX, 1897, pp. 350-381.
- T. Ashby, Sul vero sito del lago Regillo. *Rend. Acc. Lincei*, 1898, pp. 103-126; 2 cuts; 1 map.
- P. A. de Azevedo, Extractos archeologicos das 'Memorias parochiaes de 1758.' *O Archeologo Português*, Vol. III, 1897, pp. 193-208.
- M. Bach, Fundchronik vom Jahr 1897. *Fundberichte aus Schwaben, herausgegeben vom Württembergischen Anthropologischen Verein*, V, 1897, pp. 2-7; 2 cuts.
- F. Barnabei, Notizie delle scoperte di antichità del mese di Febraio 1898. *Rend. Acc. Lincei*, 1898, pp. 133-136.
- O. Basiner, The Roman Ludi Saeculares and the Carmen Saeculare. *Journal of the Ministry of Public Instruction*, department of classical philology, pp. 67-93. [Russian.]
- É. Beaudouin, Les grands domaines dans l'empire romain, d'après des travaux récents. 3^e article. *Nouvelle Revue historique de droit français et étranger*, 1898, pp. 27-115, 194-219.
- P. Belchior da Cruz, Notícias várias. I. Museu do Instituto de Coimbra. II, Pedras romanas. III, Restos romanos do Azinhal. *O Archeologo Português*, 1897, pp. 181 f.
- A. Benoît, Essai historique sur Nompateiza (voies romaines, camps romaines, pierres taillées ou sculptées, monastères). *Bull. de la Société philomatique Vosgienne*, 1897.
- E. Bergamini, La civiltà etrusca e il sepolcro dei Volunni. Assisi, 1897. 49 pp. 8vo.

- Bericht des Vereins Carnuntum in Wien für die Jahre 1895-1896. Wien, 1897. Selbstverlag. 92 pp.; 6 pls. [Tafel i, ii, iv-vii]; 54 cuts [the one on p. 31 marked Tafel iii], and a vignette. 8vo.
- F. Besnier**, Inscriptions et monuments figurés de Lambèse et de Tébéssa. *Mél. Arch. Hist.* XVII, 1897, pp. 441-465; 5 cuts.
- A. de Blasio**, Sepolero della prima età del ferro in provincia di Benevento. *B. Paletn. It.* 1897, pp. 30-33; 1 cut.
- Bodewig**, Römisches Gehöft bei Oberlahnstein. *Mitth. des Vereins für Nassauische Altertumskunde und Geschichtsforschung*, 1897-98, pp. 54-56.
- W. Boeheim**, Die Befestigungen und das Kriegswesen. pp. 262-292; pls. xi, xii; 13 cuts. Geschichte der Stadt Wien, hrgs. vom Alterthumsverein zu Wien. Redigirt von H. Zimmermann. Band I, Bis zur Zeit der Landesfürsten aus dem habsburgischen Hause 1282. Wien, 1897, A. Holzhausen. xxiv, 632 pp.; 34 pls.; 181 cuts. 4to.
- E. Boeswillwald** et **R. Cagnat**, Timgad. Une cité africaine sous l'empire romain. Paris, Leroux. Part II: pp. 25-72. Part III: pp. 73-120. Part IV: pp. 121-168. Part V: pp. 169-208. 4to.
- G. Boissier**, Promenades archéologiques: Rome et Pompéi. 6th ed. Paris, 1898. Hachette & Co. ix, 408 pp.; 8 plans. 16mo.
- J. Bonsor**, Notas arqueológicas de Carmona. *Revista de archieos, bibliotecas y museos*. Tercera época, I, 1897, pp. 568-570; cut (Roman reservoir).
— Le musée archéologique de Séville et les ruines d'Italica. *R. Arch.* XXXII, 1898, pp. 1-13; pl. i; 10 cuts.
- F. Borie**, La mort du Minotaure; miroir étrusque. *Mél. Arch. Hist.* XIII, 1898, pp. 51-63; pls. i, ii.
- E. Bormann** and **E. Kalinka**, Bericht über eine Reise in Bulgarien. *Jahreshefte d. Oesterr. Arch. Inst.* I, 1898, *Beiblatt*, pp. 51-54 (from *Anz. Wiener Akad.* 1898, No. 6).
- L. Borsari**, Della distruzione di alcuni monumenti Romani nel secolo XIV. *B. Com. Roma*, 1897, pp. 291-300.
— Nuove scoperte nella città e nel suburbio (Roma). *Not. Scavi*, 1898, pp. 185-191. [Chiefly inscriptions.]
- A. Bouché-Leclercq**, Inauguratio, pp. 435-440; Indigitamenta, pp. 468-470. *Dictionnaire des Antiq. grecques et romaines*, de Ch. Daremberg et Edm. Saglio, avec le concours de Edm. Pottier, Livr. 25. (Ima-Io.)
- E. Brizio**, Montechiaro, Scoperta di sepolcro etrusco. *Not. Scavi*, 1898, p. 5.
- F. Bulić**, Römische Cisterne in Salona. *Jahreshefte d. Oesterr. Arch. Inst.* I, 1898, *Beiblatt*, pp. 35-42; 3 figs.
— Ritrovamenti antichi. Pituntium. *Bull. di Arch. e Storia Dalmata*, 1898, pp. 56 f.
— Ritrovamenti antichi nella campagna di Spalato. *Bull. di Arch. e Storia Dalmata*, 1897, pp. 174 f.
— Ritrovamenti antichi ad Asseria. *Bull. di Arch. e Stor. Dalmata*, 1897, pp. 175 f.
— Ritrovamenti antichi nella campagna di Salona. *Bull. di Arch. e Stor. Dalmata*, 1897, pp. 201 f.

- F. Bulić**, Un' accetta preistorica nel Museo di Spalato. *Bull. di Arch. e Stor. Dalmata*, 1898, pp. 13 f.
- Ritrovamenti antichi sull' isola Torcola presso Lesina. *Bull. di Arch. e Stor. Dalmata*, 1898, pp. 15 f.
- Ritrovamenti antichi sull' isola Meleda-Melite. *Bull. di Arch. e Stor. Dalmata*, 1898, p. 16.
- L' antichissimo acquedotto di Zara. *Bull. di Arch. e Storia Dalmata*, Anno XXI, 1898, No. 1, *Supplemento*, pp. 1-12.
- Bürger**, Neuer römischer Fund in Langenau. II. *Fundberichte aus Schwaben, hrsg. vom Württembergischen Anthropologischen Verein*, V, 1897, pp. 35-39.
- J. Burckhardt**, Der Cicerone. Eine Anleitung zum Genuss der Kunstwerke Italiens. 7 Auflage, unter Mitwirkung von C. v. Fabrizy und anderen Fachgenossen bearbeitet von W. Bode. Part I: Ancient Art. Leipzig, 1898, E. A. Seemann. 2 vols.; xxiv, 199 pp. 8vo.
- E. Caetani-Lovatelli**, Scritti Vari. Roma, 1898. 206 pp. 8vo. Di una piccola larva convivale in bronzo. — L' antico culto di Bona Dea in Roma. — Lavatio Matris Deum. — Di un frammento marmoreo con rilievi gladiatorii. — Nel chiostro di San Paolo. — Il Triopio e la villa di Erode Attico. — I fuochi di Sant' Elmo. — Eucaride. — L' Armilustrum sull' Aventino. — I vigili dell' antica Roma.
- R. Cagnat**, Impedimenta, pp. 416-418; 3 cuts. Imperator, pp. 423-434; 8 cuts. Inscriptiones, pp. 528-545; 20 cuts. *Dictionnaire des Antiq. grecques et romaines*, de Ch. Daremberg et Edm. Saglio, avec le concours de Edm. Pottier, Livr. 25. (Ima-Io.)
- L. Campi** [e Pignorini], Uso del corallo nelle età preromane. *B. Paletn. It.* 1897, pp. 15-19.
- L. Cantarelli**, Cecilia Attica. Roma, 1898, Tip. dei Lincei. 24 pp. 8vo.
- De Cara**, Gli Hethei, Gli Italici della paletnologia Italiana. *La Civiltà Cattolica*, Ser. XVI, Vol. XII, qu. 1139, pp. 526-540; qu. 1142, pp. 152-164; qu. 1144, pp. 402-416; Ser. XVII, Vol. I, qu. 1146, pp. 655-668.
- Gli Hethei-Pelasgi in Italia, o gl' Itali della storia. Enotri-Itali. *La Civiltà Cattolica*, Ser. XVII, Vol. II, qu. 1148, pp. 145-156; qu. 1150, pp. 414-428.
- G. Carotti**, Relazione sulle antichità entrate nel Museo patrio d' archeologia in Milano nel 1896. *Archivio storico lombardo*, Ser. III, Fasc. 14.
- F. Carrieri**, Il motivo epico degli scudi istoriati. *Atti e memorie della R. Acad. Virgiliana di Mantova*, 1897.
- P. Castelfranco**, Necropoli di Bissone nella provincia di Pavia. *B. Paletn. It.* 1897, pp. 19-30; 1 pl.
- A. Chabret**, La necropoli Saguntina. *Boletín de la Real Acad. de la Historia*, 1897, pp. 458-466; 3 cuts.
- Chenillat**, Le Palatin (concluded). *Annales de S. Louis-des-Français*, 2me Année, 1898, pp. 223-227.
- V. di Cicco**, Antichità varie riconosciute nei circondarii di Matera e di Potenza (Tricarico, Calciano, Pietrapertosa, Castelmezzano). *Not. Scavi*, 1898, pp. 218-221.

- I. **M. Cirera**, Notas de Arqueología. *Boletín de la Sociedad Arqueológica Luliana*, Año XIII, 1897-98, pp. 274 f.
- G. **A. Colini**, Il sepolcreto di Remedello Sotto nel Bresciano e il periodo eneolitico in Italia. *B. Paleon. It.* 1898, pp. 1-47, 88-110; 40 cuts; pls. i-x. [Prehistoric remains.]
- Le Pont [romain] de Constantine. *L'Ami d. Mon.* XII, 1898, pp. 25 f.; 2 pls.
- F. **Cordenons**, Le antichità primitive di Marendole nei Colli Euganei. *B. Paleon. It.* 1897, pp. 66-81; 17 cuts.
- R. **Cotroneo**, Degli antichi e vetusti Bruzzi. Corografia degli antichi Bruzzi. *Revista Storica Calabrese*, V, Nos. 42, 43.
- L. **Coutil**, Les constructions gallo-romaines du Catelier de Criquebeuf-sur-Seine et la Ville d'Uggate. Sotteville-lès-Rouen, 1897, impr. Lecourt. 7 pp. 8vo. [Extr. from *l'Impartial des Andelys*, Sept. 23, 1897.]
- P. **Couvreux**, Incus. pp. 460-464; 11 cuts. *Dictionnaire des Antiq. grecques et romaines*, de Ch. Daremberg et Edm. Saglio, avec le concours de Edm. Pottier, Livr. 25.
- F. **Cumont**, Notices épigraphiques. *Revue de l'instruction publique en Belgique*, 1898, pp. 9-18; pl., pp. 85-94. [pp. 91 f. a record of ancient statues in Rome during the years 1609-10.]
- K. **Darnay**, On Discoveries in the Region of Sümeg. *Archaeologiai Ertésítő*, 1897, pp. 351-356; 2 cuts. [Hungarian.]
- A.-L. **Delattre**, Letter on Excavations in the Roman Amphitheatre at Carthage in 1896 and 1897. *C. R. Acad. Insc.* 1897, pp. 694-696; pl.
— Letter on Discoveries at Carthage. *C. R. Acad. Insc.* 1898, pp. 96-99.
- W. **Dennison**, On the Epigraphic Sources of Suetonius. *Am. J. Arch.* Second Series, II, 1898, pp. 26-70.
- Dieulafoy. Excavations at Martres-Tolosane in the Haute-Garonne. *C. R. Acad. Insc.* 1897, p. 673.
- Discoveries. *Mith. des Vereins für Nassauische Alterthumskunde und Geschichtsforschung*, 1897-98, pp. 37-41 (April 1, 1896-March 31, 1897), pp. 113-117 (April 1, 1897-December 31, 1897).
- A. v. **Domaszewski**, Wien zur Zeit der Römer. pp. 37-41. 6 cuts. *Geschichte der Stadt Wien*, hrsg. vom Alterthumsverein zu Wien. Redigirt von H. Zimmermann. Band I. Bis zur Zeit der Landesfürsten aus dem habsburgischen Hause 1282. Wien, 1897. A. Holzhausen. xxiv, 632 pp. 34 pls.; 181 cuts. 4to.
- Alterthumsfunde in Elsass. *Kb. Wd. Z. Ges. K.* 1898, coll. 35-37.
- A. **J. Evans**, A Roman Villa at Frilford. *Arch. Journal*, LIV, 1897, pp. 340-354; pl.
- E. **Fabricius**, Nassau: Teilstrecke Holzhausen-Hunzel. *Limesblatt*, 1898, pp. 713-738; 4 cuts.
- I. **Falchi**, Nuove scoperte nell' area della città e della necropoli (di Vetulonia). *Not. Scavi*, 1898, pp. 81-112; 21 cuts.
— Nuove scoperte nella necropoli (Vetulonia). *Not. Scavi*, 1898, pp. 141-163; 27 figs.

- V. **Federici**, Della casa di Fabio Sassi in Parione. *Archivio della R. Società romana di storia patria*, Vol. XX, 1897, pp. 479-489.
- E. **Ferrero**, Tombe di età romana (Almese). *Not. Scavi*, 1898, pp. 129-133.
 — Tombe dell' età romana scoperte nel territorio del comune (Moncalieri). *Not. Scavi*, 1898, pp. 178-179.
- A. **Mesquita de Figueiredo**, Vestigios archeologicos de Pombal. *O Archeologo Português*, Vol. III, 1897, p. 181.
- L. **Fiocca**, Castel di Sangro, l' antica Aufidena. Teramo, 1897. 8vo.
- R. **Fisch**, Eine Wanderung nach den Trümmern von Ostia. Berlin, 1898, Gärtner. 37 pp. 4to.
 — Tarracina-Anxur und Kaiser Galba im Romane des Petronius. Berlin, 1898, Gärtner. 43 pp. Large 8vo.
- P. **Fontanié**, Avignon, Orange. In Voyage de la Société archéologique de Tarn et Garonne au Comtat-Venaissin et en Provence. *B. archéologique et historique de la Société archéologique de Tarn et Garonne* [Montauban], Tome XXV, 1897, Supplément, pp. 67-91. Fol.
- G. **Fourgères**, Infula. pp. 515 ff.; 5 cuts. *Dictionnaire des Antiq. grecques et romaines*, de Ch. Daremberg, Edm. Saglio, avec le concours de E. Pottier, Livr. 25.
- A. **Fournier**, Les monuments historiques de Rambervilliers. Découverte d'une pierre à sacrifices gauloise. *Bull. de la Société philomatique Vosgienne*, 1897.
- O. **del Frate**, Guida Storica descrittiva della Falerio Etrusca (Cività Castellana). 84 pp.; 3 maps; 7 illustrations. Rome, 1898, Forzani & Co. 8vo.
- Dr. G —, Le Fanum gallo-romain de Chagnac. *Bull. Com. des Arts et Mon. historiques de la Charente-Inférieure*, 1897.
- Une nouvelle pile romaine en Gascogne. *Revue des Pyrénées, France méridionale-Espagne*, IX, 1897, p. 495.
- G. **Gatti**, Nuove scoperte nella città e nel suburbio (Roma). *Not. Scavi*, 1898, pp. 23-30; 2 cuts; pp. 64 f.; pp. 163-166 [chiefly inscriptions].
 — Notizie di recenti trovamenti di antichità. *B. Com. Roma*, 1897, pp. 164-167, 274-280, 307-316.
- P. **Gauckler**, Note sur la vallée inférieure de la Siliana à l'époque romaine. *B. Arch. C. T.* Année 1896, pp. 287-301.
- G. **Ghirardini**, Il sepolcreto primitivo di Baldaria presso Cologna Veneta. *B. Paletn. It.* 1897, pp. 122-147; 12 cuts.
- G. **Glötz**, G. **Humbert**, Incestum, Incestus, pp. 449-456. *Dictionnaire des Antiq. grecques et romaines*, de Ch. Daremberg, Edm. Saglio, avec le concours de Edm. Pottier, Livr. 25.
- Goldmann**, Neue Funde; (93) Ein drittes Mithraeum in Friedberg. *Kb. Wd. Z. Ges. K.* 1897, pp. 225-230; 2 cuts.
- P. **Grisar**, Archeologia: 86. Gli abiti antichi sacri e profani. Osservazioni generali sulla loro rappresentazione nel mosaico dell' oratorio di S. Venanzio. 87. Tunica, pallio, clamide. 88. Planeta (paenula, casula). 89. Dalmatica. 90. Il vestito liturgico dei vescovi e dei papi. *La Civiltà Cattolica*, Ser. XVII, Vol. I, qu. 1146, pp. 717-733.

- E. Groag**, Zur Laufbahn des Rutilius Gallicus. *Arch.-Ep. Mitth.* 1897, pp. 46-49.
- Groller**, Bericht der Limes-Commission. *Anzeiger der Kais. Acad. der Wissenschaften in Wien*, 1897, pp. 189-192.
- M. Grösser**, Römische Funde. *Mitth. der k. k. Central-Commission für Erforschung und Erhaltung der Kunst- und historischen Denkmäler*, Vol. XXIV, 1898, No. 1.
- St. Gsell**, Chronique archéologique africaine. *Mél. Arch. Hist.* XIII, 1898, fasc. 1, 2, pp. 60-140.
- P. Guillaibert**, Souvenirs d'une visite à l'oppidum du quartier rural dit des Brons, commune de Carnoules (Var). *Bulletin de l'Académie du Var* [Toulon], N. S. t. XX, 1897, pp. 219-222.
- P. Gusman**, Les autels domestiques de Pompéi. *Revue de l'art ancien et moderne*, 2^e année, t. III, 1898, pp. 13 ff.; 12 cuts.
- J. Hamard**, Découverte d'une nécropole romaine à Bury (Oise). *B. Arch. C. T.* Année 1896, pp. 330 f.
- F. Hermanin**, Catalogo delle incisioni con vedute romane del Gabinetto nazionale delle stampe a Roma. *Le Gallerie nazionali italiane. Notizie e documenti*, Anno III, Roma, 1897, pp. iii-lxxxx; pl.
- Hervanville**, Fours à poteries gallo-romaines et du moyen âge découvertes dans les communes de Héricourt-Saint-Samson et Fontenay-Torcy (Oise). *Mémoires de la Société académique d'archéologie, sciences et arts du département de l'Oise* [Beauvais], XVI, 1897, pp. 753-759.
- Excavations of Roman Antiquities at Hasel, Aargau; Discovery of Bronzes at Bökten, Basel-land; Roman Discoveries at Bern; Bronze Statue in Avenches. *Anzeiger für Schweizerische Altertumskunde*, 1897, pp. 114-119.
- C. B. Hauser**, Alterthümer und Funde, welche im Jahr 1897 für den Geschichtsverein von Kärnten erworben wurden. *Ausgrabungen am Dachberge bei Jakling im Lavantthale. Ein antiker Fund. Carinthia, Mitth. des Geschichtsvereins für Kärnten*, 88 Jahrgang (1898), i, pp. 28-30.
- F. Haverfield**, Quarterly Notes on Roman Britain. *The Antiquary*, 1897, pp. 360-362; 1898, pp. 70-72.
- Hadriansmauer in Nordengland. *Kb. Wd. Z. Ges. K.* XVII, 1898, Coll. 14-16.
- Discoveries of Roman Remains in Britain. *Cl. R.* 1898, pp. 83-84.
- Roman Inscriptions at South Shields. *Archæologia Aeliana*, XIX, pp. 273 f.; cut.
- Note on a Roman Shoe found at Birdswald. *Cl. R.* 1898, p. 142; cut.
- Héron de Villefosse, Paul Dissard, and J. Buche**, On Roman Remains, including a Bronze Statue, found at Coligny. *C. R. Acad. Insc.* 1897, p. 703; 1898, pp. 9 f. A Gallic inscription among the objects found is published *C. R. Acad. Insc.* 1897, p. 730; 6 pls.
- Héron de Villefosse and R. Cagnat**, Report on Discoveries behind Notre Dame, Paris. *C. R. Acad. Insc.* 1898, pp. 91-93.

F. Hettner, see O. v. Sarwey.

Hettner, Bericht über die Thätigkeit der Reichslimeskommission, 1896-1897. *Arch. Anz.* 1898, I, pp. 1-32; 1 cut.

Ch. Hülsen, Der Umfang der Stadt Rom zur Zeit des Plinius. *Röm. Mitth.* 1897, pp. 148-160; 1 plan.

— Di un Ritrovamento di Oggetti Preziosi sull' Esquilino nel 1545. *Röm. Mitth.* 1898, pp. 90-92.

M. Ihm, Nehalennia. Ausführliches Lexikon der griechischen und römischen Mythologie, hrsg. von W. H. Roscher. Vol. III, coll. 76-86; 4 cuts. Leipzig, 1898, B. G. Teubner.

G. B. Intra, I Ludi secolari: Virgilio e la città eterna. *Atti e memorie della R. Accad. Virgiliana di Mantova*, 1897.

Iveković, Ritrovamenti antichi a Kale sull' isola di Ugljan. *Bull. di Arch. e Stor. Dalmata*, 1897, pp. 158 f.

— Osservazioni di viaggio archeologiche. *Bull. di Arch. e Stor. Dalmata*, 1897, pp. 199-201.

H. Jacobi, Der obergermanisch-rätische Limes. *Centralblatt der Bauverwaltung*, XVIII, 1898, pp. 183-185; 4 cuts, pp. 189-191; 6 cuts.

L. Jacobi, Strecke Kapersburg-Kemel (Taunus). *Limesblatt*, 1898, No. 27, coll. 758-765; 4 cuts.

H. Jentsch, Funde aus römischen Wohnstätten unter dem Zwiesel in Ober-Bayern und Neolithisches von Au bei Hammerau, Bezirk Traunstein. *Zeitschrift für Ethnologie*, 1897, pp. 316-324; 24 cuts.

C. Jullian, Travaux sur l'antiquité romaine. [Bibliography of works published in France.] *Revue historique*, 1898, pp. 337-357.

E. Kapff, Der römische Begräbnisplatz beim Kastell Cannstatt. *Fundberichte aus Schwaben*, hrsg. vom Württembergischen Anthropologischen Verein, V, 1897, pp. 39-41.

G. Karo, Cenni sulla cronologia preclassica nell' Italia Centrale. *B. Paletn. It.* 1898, pp. 144-161.

Jules Keiffer, Précis des découvertes archéologiques faites dans le grand-duché de Luxembourg de 1845-1897. *R. Arch.* XXXII, 1898, pp. 116-124.

F. Kenner, Die Archäologischen Funde römischer Zeit in Wien. pp. 42-159; pl. ii-viii; 73 cuts. Geschichte der Stadt Wien, hrsg. vom Alterthumsverein zu Wien. Redigirt von H. Zimmermann. Band I. Bis zur Zeit der Landesfürsten aus dem habsburgischen Hanse 1282. Wien, 1897, A. Holzhausen. xxiv, 632 pp.; 34 pls.; 181 cuts.

Kosfer, Grüningen und der Limesturm am Leihgesterner Weg. *Limesblatt*, 1898, coll. 765-767; cut.

— Strassenturm im Wölfersheimer Walde. *Limesblatt*, 1898, coll. 767-769.

Köhl, Ueber römische Grabfelder um Worms. *Korrespondenzblatt des Gesamtvereins der deutschen Geschichts- und Altertumsvereine*, 46 Jahrgang, 1898, pp. 1-8; 2 cuts.

V. Kuzinsky, On the Site of the "castra" in Aquincum. *Archaeologiai Értesítő*, 1897, pp. 395-405; 4 cuts. [Hungarian.]

- Lamoureux.** Le mur romain de la cité (de Paris). *L'Ami d. Mon.* Vol. XII, 1898, pp. 12-25.
- R. Lanciani,** Scavi per l'apertura della via Graziosa nel 1684. *B. Com. Roma*, 1897, pp. 159-163; cut.
- Scoperte di antiche strade in Roma nel secolo XVII. *B. Com. Roma*, 1897, pp. 151-159; pl.
- Lehner,** Halberg bei Brebach, römische Fundamentreste. *Kb. Wd. Z. Ges. K.* 1898, coll. 38 f.
- Portz, Römische Baureste. *Kb. Wd. Z. Ges. K.* XVII, 1898, coll. 19 f.
- B. Lewis.** The Gallo-Roman Museum at Sens. *Arch. Journal*, LIV, 1897, pp. 308 f.
- A. Pereira Lopo,** Lápide romana de Babe. *O Archeologo Português*, III, 1897, pp. 223 f.; 1 cut.
- A Brigantia, *O Archeologo Português*, III, 1897, pp. 245-247.
- A. Madonna,** Invanum. *Rivista Abruzzese di scienze, lettere ed arti*, XII, 1897, No. 9.
- H. Maionica,** Neueste Grabungsergebnisse aus Aquileja. *Mith. d. k. k. Central-Commission für Erforschung und Erhaltung der Kunst- und historischen Denkmäler*, XXIV, 1898, pp. 45-50; 1 ground plan; 1 pl.; 4 cuts.
- Römerstrassen in Marokko. *Mith. d. k. k. Geographischen Gesellschaft in Wien*, XL, 1897, pp. 885 ff.
- L. Martin,** Fouilles du Pro Aventico, 1893-1897. *Bulletin de l'Association Pro Aventico*, 1897, pp. 22-30.
- Fouilles des particuliers, 1893-1897, *ibid.* pp. 31-34.
- O. Marucchi,** Gli obelisci egiziani di Roma (concluded). *B. Com. Roma*, 1897, pp. 196-227; facsimiles.
- Le origini di Roma e le recenti scoperte del Palatino. *Giornale Arcadico*, 1898, No. 1.
- A. Mau,** Ausgrabungen von Pompeji. *Insula*, VI, 15. *Röm. Mith.* 1898, pp. 3-59; pls. i, ii; 8 cuts.
- R. Mengarelli,** Nuove scoperte nella tenuta di Conca nel territorio dell'antica Sutricum. *Not. Scavi*, 1898, pp. 166-171; 3 figs.
- P. Meyer,** Die ägyptische Legio XXII und die Legio III Cyrenaica. Zur Geschichte der beiden Legionen. Excurs: die Neuabgrenzung Arabiens unter Septimius Severus. *Neue Jahrbücher für Philologie und Pädagogik* (Fleckeisens Jahrbücher), Vol. 155, 1897, pp. 577-595.
- Die ägyptischen Urkunden und das Eherecht der römischen Soldaten. *Zeitschrift der Savigny-Stiftung für Rechtsgeschichte. Romanistische Abteilung*, XVIII, 1897, pp. 44-74.
- L. A. Milani,** Museo Topografico dell'Etruria. Firenze-Roma, 1898, Bencini.
- A. Mocchi,** L'Antica città di Cornus, con cenni biografici di Ampsicora. Bosa, 1898. 73 pp. 8vo.
- Basil E. Modestov.** On the Origin of the Siculi as shown by the Testimony of the Ancients and by Archaeological and Anthropological Indications (Russian, with an abstract in Latin). St. Petersburg, 1898, 93 pp. 8vo. (Berlin, Calvary & Co., Mk. 1.50.)

- Basil E. Modestov**, On the Origin of the Siculi. *Journal of the Ministry of Public Instruction*, 1897, pp. 177-230. [Russian.]
- A. de Molin**, Pipes Antiques. *Bulletin de l'Association Pro Arcentico*, 1897, pp. 35-42.
- M. Much**, Grabfunde aus Zellerndorf in Nieder-Oesterreich. *Mith. d. k. k. Central-Commission für Erforschung und Erhaltung der Kunst- und historischen Denkmäler*, XXIV, 1898, 2, pp. 75-77; 5 cuts.
- A. Naef**, Fouilles romaines à Martigny. *Anzeiger für Schweizerische Altertumskunde*, XXX, 1897, pp. 93-105; pls. viii, ix; 5 cuts.
- A. de Nino**, Paeligni-Castelvecchio Subequo. Costruzioni antichi e lapidi iscritte rinvenute in contrada Macrano, dove si crede avesse avuto sede la città dei Superaequani. *Not. Scavi*, 1898, pp. 71-77; plan and cut.
- **Raiano**. Nuove scoperte nel territorio corfiniese. *Not. Scavi*, 1898, pp. 77 f.
- Ch. Normand**, Nouvelles antiquités gallo-romaines de Paris. Les arènes de Lutèce, ou le premier théâtre parisien. Paris, aux bureaux de l'Ami des Monuments et des Arts. 198 pp. Large 8vo, with an Atlas.
- Die Besiedelung des Odenwaldes in vorrömischer und römischer Zeit. *Kb. Wd. Z. Ges. K.* 1898, coll. 46-48.
- Ornstein**, An Unknown Roman Road in Dacia of the Ravenna Geographer. *Archaeologiai Ertesitő*, 1897, pp. 391-394. [Hungarian.]
- P. Orsi**, Avanzi di antichissimo villaggio siculo presso Barriera (Catania). *Not. Scavi*, 1898, pp. 222-223.
- Nuove esplorazioni nella necropoli sicula del monte Finocchito presso Noto. *B. Paletn. It.* 1897, pp. 157-197; 3 pls.; 4 cuts.
- Nuovi materiali siculi del territorio di Girgenti. *B. Paletn. It.* 1897, pp. 1-15; 2 pls.; [with G. E. Rizzo] pp. 105-122; 1 pl.
- Pachino. Abitazioni di cavernicoli presiculi, e costruzioni di età bizantina riconosciute nel territorio nel comune. *Not. Scavi*, 1898, pp. 35 f.
- Noto. Avanzi di un centro abitato dei bassi tempi riconosciuto nella penisola della Cittadella. *Not. Scavi*, 1898, pp. 36 f.
- Buscemi. Camere con nicchie ed iscrizioni incise nella roccia ed attribuite ad un ginnasio. *Not. Scavi*, 1898, p. 37.
- Giarratana. Tombe sicule in contrada Donna Scala. *Not. Scavi*, 1898, p. 37.
- Chiaromonte Gulfi. Antichità di tempi vari riconosciute nel territorio del comune. *Not. Scavi*, 1898, p. 38.
- Notizie diverse. *B. Paletn. It.* 1898, pp. 162-164; 2 cuts. [Early remains in Sicily.]
- Pallat**, Der Name und die ältesten Reste des römischen Wiesbaden. *Mith. des Vereins für Nassauische Altertumskunde und Geschichtsforschung*, 1897-1898, pp. 76-79.
- G. Patroni**, La grotta Cicchetti nell' agro di Matera. *B. Paletn. It.* 1898, pp. 81-88; 3 figs. [Prehistoric remains.]
- U. Pedrolì**, L' origine della colonia romana di Siena. *Revista di Storia antica*, Messina, Vol. II, Part 4.

- G. Pellegrini, Montepulciano. Nuove scoperte di antichità. *Not. Scavi*, 1898, pp. 19-22; 4 cuts.
- Pitigliano. Antichità etrusche e romane del territorio pitiglianese. *Not. Scavi*, 1898, pp. 50-58; 6 cuts.
- Pitigliano-Farnese. Scavi nella tenuta del Voltone. *Not. Scavi*, 1898, pp. 58-63; 2 cuts.
- P. F. Perdrizet, The Game of Morra. *J.H.S.* 1898, I, pp. 129-132; 4 cuts.
- E. Pernice, Römische Wege aus Chiusi. *Jb. Arch. I.* 1898, II, pp. 74-79; 3 cuts.
- E. Petersen [e Pigorini], Comparazioni fra le antichità italiane e le egeo-micenee. *B. Paletn. It.* 1897, pp. 81-89; 18 cuts.
- P. Piccolomini, Vestigia romane presso Siena. Siena, 1898. 8vo. [From "Miscellanea Stor. Senense."]
- F. Pichlmayr, Neue Funde: (85) Quintanis [Künzing]. *Kb. Wd. Z. Ges. K.* 1897, pp. 209-213; cut.
- P. J. Pignatari, Notizie storiche intorno alla città di Monteleone. Parte I: Ipponio. Monteleone, 1896. 115 pp. 8vo.
- Pigorini, Notizie diverse. *B. Paletn. It.* 1898, pp. 76-80; cut. [Early remains in various parts of Italy.]
- La terramara Castellazzo di Fontanellato nella provincia di Parma. *B. Paletn. It.* 1897, pp. 56-65; 1 pl.
- P. Pinton, Tre antiche vie romane nella Venezia: nota di toponomastica. *Memorie della società geografica italiana*, VI, 1897, Part 2; pl.
- G. Pinza, Scavi nel territorio falisco. *B. Paletn. It.* 1898, pp. 47-64, 110-143; 26 cuts. [Tombs with early pottery, etc.]
- P. Podestà, Nuove scoperte di antichità nell' area dell' antica Luni (Sarzana). *Not. Scavi*, 1898, pp. 179-183. [Chiefly inscriptions.]
- G. Pollini, Notizie storiche, statue antiche, documenti e antichità romane di Malesco, comune della Valle Vigizzo nell' Ossola. Torino, 1896, Clausen. 683 pp. 8vo.
- G. S. Potter, The Founders of Rome. Buffalo, New York, 1897, The Peter-Paul Book Co., 6, 28 pp. Small 8vo.
- E. Pottier, Inaures, pp. 440-447; 36 cuts. *Dictionnaire des Antiq. grecques et romaines* de Ch. Daremberg, Edm. Saglio, avec le concours de Edm. Pottier. Livr. 25.
- Puschi, Römische Funde in Triest, I. *Mitth. d. k. k. Central-Commission für Erforschung und Erhaltung der Kunst- und historischen Denkmäler*, XXIV, 1898, No. 1; 2 cuts.
- F. Reichen, Découvertes archéologiques dans le canton de Freiburg. *Anzeiger für Schweizerische Altertumskunde*, 1897, pp. 122-125.
- S. Ricci, Recenti scoperte archeologiche nel comune di Almese (16 Ott., 1897). *La Rassegna nazionale*, XIX.
- Di una lamina in bronzo lavorata a sbalzo proveniente da Rovereto ed ora presso il R. Museo di Antichità in Torino. *Nuovo Archivio Veneto*, VII, pp. 35-51.

- Richter**, Römische Niederlassung auf dem Weissenhof bei Besigheim. *Fundberichte aus Schwaben*, hrsg. vom Württembergischen Anthropologischen Verein, V, 1897, pp. 33-35; plan.
- E. Ritterling**, Die Okkupation des rechten Rheinufers durch die Römer. *Mitth. des Vereins für Nassauische Altertumskunde und Geschichtsforschung*, 1897-1898, pp. 87-98.
- Niederbieber, Kastell. *Limesblatt*, 1898, No. 27, coll. 745-757; No. 28, coll. 777-780.
- L. Rochetin**, Le Pont du Gard, Aqueduc romain conduisant à Nîmes l'eau des sources d'Airan et d'Eure, etc. *Mémoires de l'Académie de l'Audaise* [Avignon], XVI, 1897, pp. 265-282.
- P. de Rohden et E. Dessau**, Prosopographia Imperii Romani Saec. I, II, III. Pars III [P-Z]. Berlin, 1898, G. Reimer. 502 pp. 8vo.
- De Roquefeuil**, Recherches sur les ports de Carthage, exécutées sous les ordres de M. le Commandant Dutheil de la Rochère, Capitaine de frégate, commandant le Condor. *C. R. Acad. Insc.* 1898, pp. 20-39; 2 pls.
- Rutar**, Römische Grabfelder bei Svetje-Ladija und bei Lustthal, I. *Mitth. d. k. k. Central-Commission für Erforschung und Erhaltung der Kunst- und historischen Denkmäler*, XXIV, 1898, No. 1.
- Une trouvaille d'objets gallo-romains, à Saintes. *Revue de Saintonge et d'Annis* [Saintes], XVIII, 1898, pp. 46-48; 1 pl.
- A. dos Santos Rocha**, Memorias sobre a antiguidade. Figueira da Foz, 1897. 267 pp. 8vo.
- O. v. Sarwey und F. Hettner**, Der obergermanisch-raetische Limes des Römerreiches. Im auftrage der Reichs-Limeskommission. Heidelberg, O. Petters. Lief. 8 (8, 10, 16 pp.); 9 pls.; cuts. 4to.
- F. Savini**, Reste di edifici di età romana ed avanzi della primitiva cattedrale teramana, riconosciuti a S. Anna dei Pompetti (Teramo). *Not. Scavi*, 1898, pp. 137-140; fig.
- H. Schuermans**, Trouvailles d'antiquités en Belgique. *Westdeutsche Zeitschrift für Geschichte und Kunst*, 1897, pp. 375-381.
- A. Schulten**, Archäologische Neuigkeiten aus Nordafrika. *Arch. Anz.* 1898, II, pp. 112-120; 4 cuts.
- K. Schumacher**, Baden. Während des Jahres 1897 vorgenommene Untersuchungen. *Limesblatt*, 1898, No. 27, coll. 769-776.
- Die villa rustica von Boscoreale bei Pompeji. *Kb. Wd. Z. Ges. K.* XVI, 1897, pp. 241-243.
- Prähistorisches vom Limes. *Globus*, LXXIII, 1898, pp. 121-123.
- Römische Ansiedelung bei Dutenberg an der Jagst. *Fundberichte aus Schwaben* hrsg. vom Württembergischen Anthropologischen Verein, V, 1897, pp. 30-33.
- H. Schumann**, Römische Fingerringe von Hammelstall, Uckermark. *Nachrichten über deutsche Alterthumsfunde*, VIII, 1897, p. 48; 1 cut.
- W. Schurz**, Die Militärorganisation Hadrians. I. Program des Gymnasiums zu M.-Gladbach, 1897. 26 pp.

- Leader Scott.** A Christian Cemetery in a Roman Villa. *Reliquary and Illustrated Archaeologist*, 1898, pp. 73-81; 5 figs.
- A Gallic Necropolis in Italy. *Reliquary and Illustrated Archaeologist*, 1898, pp. 1-14; 10 cuts. [A necropolis near Arcevia attributed to the Senones.]
- G. Sergi,** Atri e Italici; attorno l' Italia preistorica. Torino, 1898. iv, 228 pp. 8vo.
- Umbri, Italici, Atri e loro relazioni. *Atti e Memorie della r. deputazione di storia patria per le provincie di Romagna*. Ser. III, Vol. 15, 1897, fasc. 4-6.
- Excavations at Silchester. *Athen.* May 28, 1898.
- G. Sixt,** Württemberg; Holztürme am obergermanischen Limes. *Limesblatt*, 1898, pp. 740-744.
- Société Archéologique du midi de la France, Album des monuments de l'art ancien du midi de la France. Tome I, publié sous la direction de M. Émile Cartailhac. Toulouse, 1897, E. Privat. 4to.
- A. Sogliano,** Pompei. Relazione degli scavi fatti nel mese di gennaio (1898). *Not. Scavi*, 1898, pp. 30-32; 3 cuts.
- Scafati. Avanzi di antiche fabbriche in contrada "Muregine" nell' agro pompeiano. *Not. Scavi*, 1898, pp. 33 f.
- Pompei. Relazione degli scavi fatti nel febbraio, 1898. *Not. Scavi*, 1898, pp. 68-70; 3 cuts.
- Pompei. Relazione degli scavi fatti nel mese di aprile, 1898. *Not. Scavi*, 1898, pp. 171-174; cut. . . . Maggio, *ibid.* pp. 192-195; 3 cuts.
- G. Sordini,** Spoleto. Scoperte di antichità. *Not. Scavi*, 1898, pp. 6-19.
- J. Steiner,** Archäologische Landesaufnahme im Jahr 1896 und im Frühjahr 1897. *Fundberichte aus Schwaben, hrsg. vom Württembergischen Anthropologischen Verein*. V, 1897, pp. 7-18.
- Stuttgart, Kgl. Lapidarium. *Kb. Wd. Z. Ges. K.* 1898, coll. 41-44.
- P. Tamponi,** Terranova-Fausania. Scoperte di antichità in una necropoli romana dell' agro Olbiense. *Not. Scavi*, 1898, pp. 38-40.
- Terranova-Fausania. Scoperte di antichità nell' area dell' antica Olbia, nel territorio limitrofo. *Not. Scavi*, 1898, pp. 79 f.
- A. Taramelli,** Aosta. Tomba di età romana, lucerne fittili e monete, trovate presso la porta principalis dextera, nell' antico recinto di Aosta. *Not. Scavi*, 1898, pp. 45-47.
- Treasure-trove at Taranto (with illustrations), Silver Vessels, etc. *The Graphic*, May 12, 1898.
- H. Thédenat,** Le Forum Romain et les Forums Impériaux. Paris, 1898, Hachette & Co. xii, 406 pp.; 2 plans; 46 cuts. 8vo.
- Anneau romain trouvé à Théroüanne. *Bull. historique de la Société des antiquaires de la Morinie* (St. Omer). 1897, 4^e fasc.
- C. Tonini,** Tombe di età romana scoperte presso il villaggio di Gaiofana (Rimini). *Not. Scavi*, 1898, p. 137.

- J. Toutain.** Imperium, pp. 418-423. *Dictionnaire des Antiq. grecques et romaines*, de Ch. Daremberg, Edm. Saglio, avec le concours de Edm. Pottier. Livr. 25. (Ima-Io.)
- Tragan,** Die Befestigungsanlagen von Carnuntum. *Arch.-Ep. Mitth.* 1897, pp. 173-203; pls. i-iii; 17 cuts.
- Westthor des Amphitheaters zu Carnuntum. *Arch.-Ep. Mitth.* 1897, pp. 204-224; pls. iv, v; 2 cuts.
- Weg zum Westthor des Amphitheaters. *Arch.-Ep. Mitth.* 1897, pp. 225-227; pl. vi; 2 cuts.
- Trier, Römische Steindenkmäler. *Kb. Wd. Z. Ges. K.* 1898, coll. 40 f.
- Trier, Spielstein mit Graffito. *Kb. Wd. Z. Ges. K.* 1898, coll. 39 f.; 1 cut.
- C. Urseau,** Les fouilles archéologiques de Mérou. Angers, 1897, impr. et libr. Germain et Grassin. 18 pp. 8vo. [Extrait de *La Revue de l'Anjou*.]
- J. L. de V.,** Acquisições do Museu Ethnologico Português. *O Archeologo Português*, 1897, pp. 167 f.
- L. Valmaggi,** Per la storia del Circo Massimo e per due passi di Livio. *Rivista di filologia*, Vol. XXVI, fasc. 1, pp. 114-117.
- O. Vanvillé,** Cimetière gallo-romain de Soissons. *Bull. de la Société d'anthropologie de Paris*, 1897, pp. 290 f.
- R. Vidal,** Archéologie du Var: Toulon. *Bulletin de l'Académie du Var*. [Toulon.] N. S., Tome XX, 1897, pp. 89-198.
- E. Wagner,** Durlach (Baden): römische Funde. *Kb. Wd. Z. Ges. K.* 1898, coll. 34 f.
- Th. Wellaner,** Trouville à Nyon. *Anzeiger für Schweizerische Altertumskunde*, XXX, 1897, pp. 130 f.; 3 cuts.
- Wolff,** Heddernheim, Kastell, Stadtbefestigung, Strassen und Töpferöfen. *Limesblatt*, 1898, No. 28, coll. 780-792.
- J. Zemp,** Kleinere Nachrichten. *Anzeiger für Schweizerische Altertumskunde*, 1897, pp. 138-143. [Includes various discoveries of Roman remains.]
- A. Zorzi,** Bronzi preromani di ornamento personale, rinvenuti nel territorio del comune (San Pietro al Natisone). *Not. Scavi*, 1898, p. 133.

II. ROMAN ARCHITECTURE

- Adamklissi. *Archaeologiai Ertesítő*, 1897, pp. 377-380. [Hungarian.]
- Ausgrabungen und Funde (in Berthouville, theatre and wells). *Kunstchron.* N. F., IX, 1897-1898, p. 156.
- L. Beltrami,** Il Pantheon: relazione delle indagini eseguite dal R. Ministero della pubblica istruzione negli anni 1892-1893, coi rilievi e disegni dell'architetto P. O. Armanini. Milan, 1898, 75 pp.; 5 pls. 4to.
- O. Benndorf,** Adamklissi noch einmal. *Jahreshefte d. Oesterr. Arch. Inst.* I, 1898, pp. 122-137; fig.
- Besnier,** Petits bronzes de la collection Farges à Constantine. *Mél. Arch. Hist.* XIII, 1898, pp. 65-68; pls. iii, iv.
- De la Croix,** On Excavations at Berthouville. *B. Soc. Ant. Fr.* 1897, pp. 228-232.

- G. Fregni, Sulla celebre colonna al nome dell' imperatore Foca in Roma. Modena, 1898, Namias. 78 pp. 8vo. [The column is ascribed to Tiberius Constantinus.]
- C. Frossard, Notice sur le temple de Bagnères en Bigorre. Paris, 1898, Grasset. 11 pp. 8vo.
- A. de Gravillon, L'exhumation du temple de Diana d'Aix-les-Bains. *Journal des Artistes*, October, 1897.
— Le temple de Diane à Aix-les-Bains. Lyon, impr. Rey. 7 pp. 8vo.
- P. Gusman, La villa d'Hadrien. *Gaz. B. A.* 1897, pp. 469-480; 7 cuts.
- S. Jenny, Bauliche Überreste von Brigantium. *Mitth. d. k. k. Central-Commission für Erforschung und Erhaltung der Kunst- und historischen Denkmale*, XXIV, 1898, 2, pp. 78-83; 2 pls.; 4 cuts.
- A. Marquand, On a Capital from the Temple of Jupiter Capitolinus in Rome. *Am. J. Arch.* Second Series, II, 1898, pp. 19-25; 3 figs.
- C. N., Le Théâtre antique de Tintiniae (Corrèze). *Ami d. Mon.* XI, 1897, pp. 259 f.; 1 pl.
- G. Niemann, Zur Basis des Tropaeums von Adamklissi. *Jahreshefte d. Oesterr. Arch. Inst.* I, 1898, pp. 138-142; 4 figs.
- O. de Rochebrune, Le temple gallo-romain d'Yzeures. Vannes, 1898, Lafolye. 11 pp. 8vo.
- C. Schultess, Bauten des Kaisers Hadrian (Sammlung Gemeinverständl. wissenschaftl. Vorträge hrsg. v. R. Virchow, N. F., XIII Serie, Heft 289-290). Hamburg, 1898, Druckerei A. G. (vorm J. F.) Richter. 76 pp. 8vo.
- K. Schumacher, Ein Dianentempel auf der Höhe des Schwarzwaldes. *Münchener Allgemeine Zeitung*, 1897, Nr. 279, Beilage.
- I. M. J. Valetton, De templis Romanis. *Mnemosyne*, N. S., XXVI, 1898, pp. 1-93.

III. ROMAN SCULPTURE

- P. v. Bienkowski, Tarentiner Relief-fragmente. *Jahreshefte d. Oesterr. Arch. Inst.* I, 1898, pp. 17-27; pl. ii; 12 figs.
- E. Brizio, Rinvenimento di un busto in bronzo (Gualtieri). *Not. Scavi*, 1898, pp. 134-135; fig.
- W. Cart, Statuette de Silène. *Bulletin de l'Association Pro Arentico*, 1897, pp. 2-8; 2 pls.
- Carton, On a Terra-cotta Disk from Bavai. *B. Soc. Ant. Fr.* 1897, pp. 311-313.
- Ed. Courbaud, Imago, pp. 409-415; 5 cuts. *Dictionnaire des Antiquités grecques et romaines*, de Ch. Daremberg et Edm. Saglio, avec le concours de Edm. Pottier. Livr. 25. (Ima-Io.)
- L. Mariani, La Pallade di piazza Sciarra. *B. Com. Roma*, 1897, pp. 281-290; 2 pls.
- L. Morel, On a Statuette of a Nude Youth from Reims. *B. Soc. Ant. Fr.* 1897, pp. 252-253. [Perhaps a Bacchus.]
- E. Petersen, Die Reliefschranken auf dem römischen Forum. In "Abhandlungen Alexander von Oettingen zum 70^{ten} Geburtstage gewidmet von Freunden und Schülern," pp. 130 ff. Munich, 1898, C. H. Beck.

- P. Reinecke**, Antike Germanendarstellungen in Bronze. *Zeitschrift für Ethnologie*, 1898, pp. 587 f.; 3 cuts.
- Richter**, Ein neues Epona-Relief. *Fundberichte aus Schwaben, hrsg. vom Württembergischen Anthropologischen Verein*, V, 1897, pp. 41 f.
- G. E. Rizzo**, Forme fittile Agrigentine. *Böm. Mitth.* 1897, pp. 253-306; 1 pl.; 24 cuts.
- V. Rydberg**, Skrifter, IX, Romerske kejsare i marmor samt Andra uppsatser. Stockholm, 1897, A. Bonnier. 400 pp. 8vo.
- L. Savignoni**, Brescia. Marmi architetonici e sculture rimesse a luce entro l'abitato. *Not. Scavi*, 1898, pp. 3-5; 1 cut.
- J. Toutain**, Letter on Statuettes and Fragments of Statues found near Tebessa, Algeria. *C. R. Acad. Insc.* 1897, p. 692.
- G. Wissowa**, Römische Götterbilder. *Neue Jahrbücher für das klassische Alterthum, Geschichte und deutsche Litteratur und für Pädagogik*, I Jahrgang (1898), pp. 161-173; 3 cuts.
- E. Wuescher-Becchi**, La statua di un flamen nel palazzo già Sacripante in piazza Fiammetta. *B. Com. Roma*, 1897, pp. 301-306; 3 cuts.

IV. ROMAN, ETC., VASES AND PAINTING

- Arcelin**, Letter on an Ancient Mosaic found at Sens. *C. R. Acad. Insc.* 1898, pp. 16 f.
- E. Brizio**, Di un pavimento a mosaico scoperto nel cortile del palazzo comunale (Bologna). *Not. Scavi*, 1898, pp. 135-137; fig.
- A. Chiappelli, L. Stein**, Ein jüngst bei Pompeji freigelegtes Mosaikbild der "Schule von Athen." *Archiv für Geschichte der Philosophie*, XI (N. F., IV), 1897, pp. 171-180; pl.
- G. Cozza-Luzi and O. Marucchi**, Di alcuni graffiti del Palatino nella casa di Tiberio presso il Clivus Victoriae. Rome, 1898. 8 pp.; 3 pls. Folio.
- Not Crucifixion Sketches**. Reasons for Doubting the Interpretation put on the newly found Graffiti in Rome. *New York Tribune*, Illustrated Weekly Supplement, March 6, 1898; 2 cuts.
- Diels**, Das in Torre Annunziata aufgefundenene Mosaik. (Berlin Arch. Soc. March, 1898.) *Arch. Anz.* 1898, II, pp. 120-122; 1 cut.
- G. Donati**, Di un' urna etrusca nel museo di Perugia. Perugia, 1898. 10 pp. 8vo.
- R. Engelmann**, Eine Vase in Spongano. (Berlin Arch. Soc. February, 1898.) *Arch. Anz.* 1898, I, pp. 50-52; 4 cuts.
- H. N. Fowler**, Portraits of Virgil. *Western Reserve University Bulletin*, April, 1898, pp. 28-37.
- Gindriez**, Mosaïque avec des noms d'auriges. *Revue épigraphique du midi de la France*, 1898, No. 88, pp. 211 f.
- The Graffito of the House of Tiberius in the Palace of the Caesars.** *Independent*, June 16, 1898.

- Les graffiti du Palatin. *Revue critique d'histoire et de littérature*. XXXII. 1897, No. 8, p. 154.
- Il graffito scoperto al Palatino. *L'Illustrazione Italiana*, 1898, No. 7, pp. 113 f.; 4 cuts.
- O. Jozzi, Di un graffito Palatino. Rome, 1898.
- T. Lehoczky, Shards with Stamps from Pannonia. *Archaeologiai Ertesítő*, 1897, p. 350; 5 cuts; p. 371; 4 cuts. [Hungarian.]
- M. Mayer, Ceramica dell' Apulia preellenica. I. La Messapia. *Röm. Mitth.* 1897, pp. 201-252; 1 pl.; 25 cuts.
- Vasi dipinti scoperti in tombe della necropoli canosina. *Not. Scavi*, 1898, pp. 195-218; 17 figs. [Primitive vases from Canosa.]
- G. Patroni, L'ossuario tipico di Villanova e le anfore a rotelle lucano-apule. *B. Paletn. It.* 1898, pp. 65-74; 7 figs.
- A. de Puisaye, On a Lamp in the Musée Saint-Louis at Carthage. *B. Soc. Ant. Fr.* 1897, pp. 246-251; 2 cuts.
- Samter, Die Wandgemälde des Columbariums der Villa Pamphili. (Berlin Arch. Soc. February, 1898.) *Arch. Anz.* 1898, I, pp. 47-50.

V. ROMAN INSCRIPTIONS

- J. Albanès, Inscriptions de Provence. *R. Arch.* XXXII, 1898, pp. 277-285.
- Inscriptions d'Antibes, dép. des Alpes Maritimes. *Revue épigraphique du midi de la France*, 1897, No. 87, p. 484.
- A. del Arco, Tarragona, recbro de una lápida. *Boletín de la Real Acad. de la Historia*, 1898, pp. 88 f.
- Nueva inscripción del teatro romano de Tarragona. *Boletín de la Real Acad. de la Historia*, 1898, pp. 169-171; cut.
- F. Barnabei, Andria. Titoli sepolcrali rinvenuti nel territorio del comune. *Not. Scavi*, 1898, pp. 34 f.
- Ravenna. Nuovi frammenti marmorei con resti di iscrizioni. *Not. Scavi*, 1898, pp. 48 f.
- Hirpini, Benevento. Iscrizione ebraica scoperta nell'abitato. *Not. Scavi*, 1898, pp. 78 f.
- A. Bellino, Novas inscrições de Braga (ineditas). Braga, 1896. 2 illustrations [edition of 200 copies]. 55 pp. 8vo.
- Ph. Berger, Deux inscriptions funéraires de Napolouse. *C. R. Acad. Insc.* 1898, pp. 48-54.
- M. R. de Berlanga, Estudios epigráficos. De algunas inscripciones falsas. *Revista de la Asociación Artístico-Arqueológica Barcelonesa*, II, 1898, pp. 505-520, 569-581.
- E. F. Bischoff, Epigraphisch-Kalendarisches. *Rheinisches Museum für Philologie*, N. F., LIII, 1898, p. 328.
- E. Bormann, Zu den römischen Militärdiplomen. *Arch.-Ep. Mitth.* 1897, pp. 155-170; 8 cuts.
- Epigraphische Funde. *Arch.-Ep. Mitth.* 1897, pp. 235-246; 6 cuts.

- L. Borsari**, Latium. Civita Lavinia. Di un importante titolo votivo a Bellona, scoperto nel territorio lanuvino. *Not. Scavi*, 1898, pp. 66 f.
- F. Bücheler**, Oskisches aus Pompeji. *Rheinisches Museum für Philologie*, N. F., LIII, 1898, pp. 205-208.
- F. Bulić**, Iscrizioni inedite: Salona. *Bull. d. Arch. e Stor. Dalmata*, 1898, pp. 48-52.
 — Iscrizioni inedite: Aeron, Onaeum, Salona. *Bull. d. Arch. e Stor. Dalmata*, 1897, pp. 145-153.
 — Iscrizioni inedite (Salona). *Bull. d. Arch. e Stor. Dalmata*, 1897, pp. 177-181.
 — Nomi e marche di fabbrica su tegoli acquistati dal museo di Spalato nel 1897. *Bull. d. Arch. e Stor. Dalmata*, 1897, pp. 191 f.
 — Iscrizioni già pubblicate nel C.I.L. III ed acquistate nel anno corrente dal Museo. *Bull. d. Arch. e Stor. Dalmata*, 1897, pp. 181-183.
 — Iscrizioni inedite: Narona, Ager Salenitanus, Salona. *Bull. d. Arch. e Stor. Dalmata*, 1898, pp. 3-10.
- R. Cagnat**, Revue des publications épigraphiques relatives à l'antiquité romaine. *R. Arch.* XXXII, 1898, pp. 315-320.
 — L'année épigraphique. Revue des publications épigraphiques relatives à l'antiquité romaine. X^e année (1897). Paris, 1898, Leroux. 1 pl. 8vo.
 — Chronique d'épigraphie africaine. *B. Arch. C. T.*, année 1896, pp. 223-286. [256 inscriptions, mostly Latin.]
- J. Cholodniak**, Carmina Sepulcralia Latina. St. Petersburg, 1898. iii, 625 pp. 8vo.
 — Some Types of Roman Metrical Grave-inscriptions. *Journal of the Ministry of Public Instruction*, department of classical philology, 1897, pp. 97-113. [Russian.]
- Inscription celtique accompagnée d'une statue, Coligny, dép. de l'Ain. *Revue épigraphique du midi de la France*, 1897, No. 87, pp. 493 f.
- L. Cordeiro**, Inscriptões Portuguesas. I, fasciculo, 50 pp. Lisboa, 1895. 8vo. II, fasciculo, 88 pp. Lisboa, 1896. 8vo.
- Corpus Inscriptionum Latinarum, consilio et auctoritate academiae litterarum regiae borussicae editum. Vol. IV. Supplementum, Inscriptionum parietarium Pompejanorum supplementum. Accedunt tabulae ceratae editae a C. Zangemeister, et vasorum fictilium inscriptiones editae ab A. Mau. Pars I. Tabulae ceratae Pompeis repertae annis 1875 et 1887, editae a C. Zangemeister. Berlin, 1898, G. Reimer. Cuts; 182 pp. [Pp. 273-454.] Folio.
- G. Cozza-Luzi**, Di un cantico filatterio (pl.) trovato a Reggio di Calabria. Reggio, 1898.
- A. Crespellani**, Modena. Iscrizione funebre metrica e ruderi di antiche fabbriche rimessi a luce fuori del recinto urbano. *Not. Scavi*, 1898, pp. 47 ff.
- J. G. D.**, Milliaire de Gordien. *Revue biblique*, VII, 1898, pp. 110-112.
- A. L. Delattre**, On an Inscription from Carthage. *C. R. Acad. Insc.* 1897, pp. 722-725.
- L. Demaeght**, Inscriptions inédites de la Mauritanie Césarienne. *Bull. de la société de géographie et d'archéologie de la province d'Oran*, 1897.

- Les dieux de la Gaule. *Revue épigraphique du midi de la France*, 1897, No. 87, pp. 495-506; 1898, No. 88, pp. 512-520.
- Dissard**, Inscription de Lyon. *Revue épigraphique du midi de la France*, 1898, No. 88, p. 511.
- Additions et corrections au texte de l'inscription gauloise trouvée à Coligny (Ain). *C. R. Acad. Insc.* 1898, pp. 163-167 and (text of the inscription) pp. 299-336.
- E. Dunant**, Note sur deux milliaires de Prévessin. *Anzeiger für Schweizerische Altertumskunde*, XXX, 1897, pp. 86-92.
- F. Fabrellas**, Lápidas romanas de Encinasola. *Boletín de la Real Acad. de la Historia*, pp. 427-429.
- E. Ferrero**, I titoli di vittoria dei figli di Costantino. I fasti dei prefetti del pretorio di Bartolomeo Borghesi. Mogli e figlie di Costantino. *Atti della R. Acad. delle scienze di Torino*, XXXIII (1896-1897).
- Consilium. In *Dizionario epigrafico di antichità Romane* di Ettore Ruggerio, fasc. 56, pp. 609-618; *Consors Imperii*, *ibid.* pp. 624-627; *Constans*, *ibid.* pp. 627-631; *Constantinus I*, *ibid.* pp. 637-640, fasc. 57, pp. 641-655; *Constantinus II*, *ibid.* pp. 655-659; *Constantinus III*, *ibid.* pp. 659 f.; *Constantius Chlorus*, *ibid.* pp. 660-668; *Constantius II*, *ibid.* pp. 668-672.
- F. Fita**, Los "Callenses Aeneanici" del Arahál y de Montellano. *Boletín de la Real Acad. de la Historia*, 1897, pp. 381-390.
- Inscricción consular de Bérvido Flavio. *Boletín de la Real Acad. de la Historia*, 1897, pp. 171 f.
- and A. R. V., Inscricción romana de Tanger. *Boletín de la Real Acad. de la Historia*, 1897, p. 176.
- Fragment d'építaphe, Auch, dép. du Gars, *Revue épigraphique du midi de la France*, 1897, No. 87, p. 494 f.
- G. Fregni**, Sui caratteri etruschi ed umbri. Al Sig. Dr. Lucio Mariani. Lettera aperta. Modena, 1898. 16 pp. 8vo.
- G. Gatti**, Cippo sepolcrale con iscrizione latina. *Not. Scavi*, 1898, p. 184. [From Nepi.]
- On an Inscription found in the Via Galvani (Rome). *Rend. Acc. Lincei*, 1898, p. 243. [Cf. *Not. Scavi*, 1898, p. 164.]
- P. Gauckler**, Note sur une inscription de Ksar-Bou-Fetha. *C. R. Acad. Insc.* 1898, pp. 275-278.
- On Inscriptions from Tunisia. *B. Soc. Ant. Fr.* 1897, pp. 300-305.
- F. Haverfield**, Roman Inscriptions from Aesica. *Archaeologia Aeliana*, XIX, pp. 268-273; 4 cuts.
- Héron de Villefosse**, Roman Inscription in Aegina. *B. Soc. Ant. Fr.* 1897, p. 251.
- Diplôme militaire de l'année 139, découvert en Syrie. *C. R. Acad. Insc.* 1897, pp. 679-684.
- Le calendrier du Lac d'Antre. *C. R. Acad. Insc.* 1898, pp. 264-272. [A fragment of a calendar similar to that of Coligny.]
- and **Ducroquet**, On an Inscription from Oudna, Tunisia. *C. R. Acad. Insc.* 1897, pp. 725 f.

- O. Hirschfeld.** Decimus Clodius Albinus. *Revue épigraphique du midi de la France*, 1897, No. 87, pp. 507 f.; 1898, No. 88, pp. 520-524.
- A. Hübner.** Inscriptio arae Romanae repertae in oppido aliquo vetusto sed ignoto Lusitaniae orientalis. *O Archeologo Português*, III, 1897, pp. 161-171.
- A. v. Jaksch.** Römischer Grenzstein. *Carinthia, Mitth. des Geschichtvereines für Kärnten*, 88 Jahrgang (1898), i, p. 30.
- C. Jullian.** Une marque de fabrique avec la croix. *C. R. Acad. Insc.* 1898, pp. 10-15; pl.
- Körber.** Mainz, Römische Inschriften. *Kb. Wd. Z. Ges. K. XVII*, 1898, coll. 1-8.
- R. Lanciani.** Le schede epigrafiche di Ferdinando Ughelli. *B. Com. Roma*, 1897, pp. 143-151.
- Ch. Latourneau.** La paléographie mégalithique de certaines lettres latines. *Bull. de la Société d'Anthropologie de Paris*, 1897, pp. 274-279; 9 cuts.
- W. M. Lindsay.** Handbook of Latin Inscriptions. London and Boston.
- J. Macdonald.** Tituli Hunteriani. An Account of the Roman Stones in the Hunterian Museum, University of Glasgow. Glasgow, Annan, xii, 102 pp. 4to.
- E. de Magistris.** La militia vigilium della Roma imperiale. Rome, 1898. 102 pp. 8vo.
- Mainz, römische Inschriften. *Kb. Wd. Z. Ges. K. XVII*, 1898, No. 3, coll. 44-46.
- H. Majonica.** Inschriften in Grado. *Jahreshefte d. Oesterr. Arch. Inst.* I, 1898, Beiblatt, pp. 83-88; fig.
- M. R. Martinez.** Inscripciones romanas de Burguillos. *Boletín de la Real Acad. de la Historia*, XXXII, 1898, pp. 182-196.
- Marucchi.** Della importanza dell' epigrafia romana. *Giornale Arcadico*, 1898, Nos. 4, 5.
- Michon.** On Seven Roman Inscriptions in the Louvre from the Courajod Collection. *B. Soc. Ant. Fr.* 1897, pp. 281-284. [All are funerary.]
- El Marqués de Monsalud.** Nuevas inscripciones romanas y visigóticas. *Boletín de la Real Acad. de la Historia*, 1897, pp. 391-404.
- Nuevas lápidas romanas de Extremadura. *Boletín de la Real Acad. de la Historia*, 1897, pp. 436-442.
- Lápidas inéditas. *Boletín de la Real Acad. de la Historia*, 1898, pp. 5-9.
- Nuevas inscripciones romanas de Extremadura. *Boletín de la Real Acad. de la Historia*, 1898, pp. 149-153.
- Inscripción romana inédita descubierta en Mérida. *Boletín de la Real Acad. de la Historia*, 1898, p. 352. Nuevas inscripciones romanas. *Ibid.* pp. 364-365.
- Mowat.** On Inscribed Dice. *B. Soc. Ant. Fr.* 1897, pp. 307-310; 2 cuts.
- F. Nissardi.** Seulo. Di un nuovo diploma militare. *Not. Scavi*, 1898, pp. 41-44; 2 cuts.
- J. Offord.** Roman Inscriptions relating to Hadrian's Jewish War. *S. Bibl. Arch.* 1898, pp. 59-69.

- C. Olshausen, Frührömische Fibel mit der Aufschrift AVCISSA (concluded). *Zeitschrift für Ethnologie*, 1897, pp. 289 f.
- C. Pauli, Corpus inscriptionum etruscarum ab academia litterarum regia borussica Berolinensi, et societate litterarum regia saxonica Lipsiensi pecuniis adjutum, administrante A. Danielsson. Leipzig, 1898, J. A. Barth. 80 pp. [pp. 395-474.] Fol.
- G. Pellegrini, Urna di travertino con iscrizione etrusca. *Not. Scavi*, 1898, p. 183; [From Piansano.]
- Iscrizioni etrusche e latine di fittili. *Not. Scavi*, 1898, p. 184. [From Sovana.]
- A. Pereira Lopo, Lapide romana. *O Archeologo Português*, III, 1897, p. 192; cut.
- G. de Petra, Epigrafe latina scoperta sul monte di Cuma. *Not. Scavi*, 1898, p. 192.
- R. v. Plantas, Nachträge zur Sammlung oskisch-umbrischer Inschriften. *Indo-germanische Forschungen*, VIII, 1897, pp. 315 f.
- Ph. Pouzet, Le milliaire de Mirabel. *R. Arch.* XXXII, 1898, pp. 50-55; plan.
- Pouzet, Milliaire d'Antonin le Pieux, sur la route d'Aps à Uzès. *Revue épigraphique du midi de la France*, 1898, No. 88, pp. 509-511.
- G. Puig y Larrasz, Cantibedonieses. *Boletín de la Real Acad. de la Historia*, XXXII, 1898, pp. 196-202.
- S. Ricci, Epigrafia Latina. 75 facsimiles. Milan, 1898, Hoepli. [An elementary treatise.]
- A. Riese, Aucissa. *Kb. Wd. Z. Ges. K.* XVII, 1898, No. 3, coll. 56 f.
- E. Ritterling, Die Statthalter der pannonischen Provinzen. *Arch.-Ep. Mitth.* 1897, pp. 1-40.
- Die Cohortes Aquitanorum des obergermanischen Heeres. *Kb. Wd. Z. Ges. K.* XVI, 1897, pp. 236-241.
- Ettore di Ruggiero, Dizionario epigrafico di Antichità Romane. Fasc. 56 (II, 20), Consensus-Constantinus I; Fasc. 57 (II, 21), Constantinus I-Constantinus II.
- F. Savini, Una nuova lapide d' Interamnia. *Rivista Abruzzese di scienze, lettere ed arti*, XII, 1897, No. 8.
- V. Scialoja, Le case dei decurioni di Taranto e dei senatori Romani. Nota ad un passo della legge Tarentina (*Rend. Acc. Lincei*, 1898, pp. 216-219).
- H. Segond, Note sur le milliaire de Bauduen et sur l'emplacement des milliaires de la voie de Biez. *Bull. de la Société des études scientifiques et archéologiques de la ville de Draguignan*, t. XX, 1894-1895, pp. 213-224.
- P. Sticotti, Epigrafi Romane. *Atti e memorie della società istriana di archeologia e storia patria*, XIII, 1897, pp. 243-264.
- H. Swoboda, Epigraphisch-historische Beiträge. *Arch.-Ep. Mitth.* 1897, pp. 115-150.
- G. Téglás, The Determination of the Station "ad Scrofulas" of the Tabula Peutingeriana by Means of the Tablet of Domitian by the Gospodin Whirlpool. *Archaeologiai Közlemények*, 1897, pp. 63-71. [Hungarian.]

- F. P. Thiers**, Note sur l'inscription de Coligny (Ain). *C. R. Acad. Insc.* 1898, pp. 167-170.
- J. Toutain**, L'inscription d'Henchir-Mettich. Un nouveau document sur la propriété agricole dans l'Afrique romaine. Paris, 1897, Klincksieck. 55 pp. 4to.
- A. Valle**, Constantinopolis. In *Dizionario epigrafico di Antichità Romane* di Ettore di Ruggiero. Fasc. 56 (II, 20: Consensus-Constantinus I), pp. 632-637.
- De Waal**, Inschriften von der Via Salaria. *Römische Quartalschrift für christliche Altertumskunde und für Kirchengeschichte*, XI, 1897, pp. 555-557.
- Roman inscription at Windisch, Canton Aargau. *Athen*. April 2, 1898.
- R. Wuensch**, Di un' antica lastra di piombo iscritta, conservata nel magazzino archeologico comunale di Roma [a deuotio]. *B. Com. Roma*, 1897, pp. 103-109; plate.
- C. Zangemeister**, see *Corpus Inscriptionum*.
- Zangemeister**, Rothenhausen Merkur-Inschrift. *Kb. Wd. Z. Ges. K.* XVII, 1898, coll. 37 f.

VI. ROMAN COINS

- E. Babelon**, Incusa signa. Incusi (nummi), pp. 464-468; 6 cuts. *Dictionnaire des Antiq. grecques et romaines*, de Ch. Daremberg, Edm. Saglio, avec le concours de E. Pottier. Livr. 25.
- B. Bethune**, Trouaille de monnaies romaines à Courtrai. *Revue belge de numismatique*, LIV, 1898, No. 2, pp. 214-220.
- J. A. Blanchet**, Un projet de monnaie de la république romaine. *R. Num.* 1898, pp. 122 f.; 1 cut.
- J. G. Bulliot**, Notice sur des moules de monnaies antiques trouvés à Autun. *Mémoires de la Société éduenne* [Autun], N. S., XXV, 1897, pp. 45-64.
- A. de By.**, Monnaies trouvées dans des ruines gallo-romaines. *R. Num.* 1898, p. 131.
- G. M. Columba**, La numismatica delle isole del Mar Libico. (Coins of Melita, Gaulos, and Cossura.) *R. Ital. Num.* 1898, pp. 12-20.
- Desnoyers**, Médailles romaines trouvées à Boisseau en février, 1896, p. 444. Médailles romaines trouvées dans la Loire en 1893 et dans un faubourg d'Orléans en 1893-1894. *Bulletin de la Société archéologique et historique de l'Orléans*, Tome XI, 1897, pp. 449-451.
- C. Farcinet**, Mélanges de numismatique et d'histoire. Les monnaies des empereurs gallo-romains (de 258 à 273). Vannes, 1898, Lafolye. 12 pp.; cuts. 8vo. [Extrait de la *Revue du Bas-Poitou*, 3^e trimestre, 1897.]
- E. Ferrero**, Piccolo ripostiglio di monete romane imperiali di bronzo. *Not. Scavi*, 1898, p. 177.
- E. Gàbrici**, Di un ripostiglio di monete dei Bruttii. *Not. Scavi*, 1898, pp. 174-176.
- G. F. Gamurrini**, Di uno statere di oro di Filippo II trovato nella tenuta del Voltone (Pitigliano). *Not. Scavi*, 1898, pp. 140-141.

- M. Glavinić** and **W. Kubitschek**, Ein Denarfund in Dalmatien. *Jahreshefte d. Oesterr. Arch. Inst.* I, 1898, *Beiblatt*, pp. 83-84.
- Fr. Gnechi**, Appunti di numismatica Romana, XLV. Contribuzioni al *Corpus Numorum*. *R. Ital. Num.* 1898, pp. 43-62; pls. i, ii. [24 *inedita* and variants, mostly medallions, from Claudius to Eugenius, which have passed into his possession from the old Boyne collection at Florence.]
- Kubitschek**, Ripostiglio di monete illiriche da Škudljivac sull' isola Lesina. *Bull. d. Arch. e Stor. Dalmata*, 1897, pp. 159-171.
- L. Martin**, Supplément et rectifications au catalogue du médailler. *Bulletin de l'Association Pro Aventico*, 1897, pp. 9-21.
- Moser**, Münzfund bei Prosecco. *Mith. d. k. k. Central-Commission für Erforschung und Erhaltung der Kunst- und historischen Denkmäler*, XXIV, 1898, No. 1.
- R. Mowat**, On Coins of Gallienus. *B. Soc. Ant. Fr.* 1897, pp. 295-297.
— Contremarques sur les tessères romaines de bronze et de plomb. Les Spintriennes. *R. Ital. Num.* 1898, pp. 21-42.
- W. Nestle**, Funde antiker Münzen im Königreich Württemberg. *Fundberichte aus Schwaben*, hrsg. vom Württembergischen Anthropologischen Verein, V, 1897, pp. 43-49.
- L. Pallat**, Depotfund von Eibingen bei Rüdesheim. *Annalen des Vereins für Nassauische Altertumskunde und Geschichtsforschung*, XXIX, 1897, pp. 1-4; pl. Cf. *Mith. des Vereins*, 1897-1898, p. 76.
- G. Sixt**, Münzfund von Frickingen, O.-A. Neresheim. *Fundberichte aus Schwaben*, hrsg. vom Württembergischen Anthropologischen Verein, V, 1897, pp. 49 f.
- Il ripostiglio di Tiriolo (prov. di Catanzaro). *R. Ital. Num.* 1898, pp. 158 f.

CHRISTIAN ART

I. GENERAL AND MISCELLANEOUS

- Mariano Armellini**, Lezioni di archeologia cristiana. Rome, 1898. Tip. della Pace. xxix, 653 pp. 8vo.
- G. Biscaro**, Note e documenti per servire alla storia delle arti trivigiane, Treviso, 1897.
- S. Borghesi** e **L. Banchi**, Nuovi documenti per la storia dell' arte senese. Siena, 1898, 702 pp. 8vo.
- F. Brogi**, Inventario generale degli oggetti d' arte della provincia di Siena. Siena, 1897, C. Nava.
- A. Brykezynski**, Vases acoustiques à Violslaven (Pologne). *R. Art. Chrét.* 1898, p. 130.
- Bulić**, Scavi nell' antico cimitero cristiano di Manastirne a Salona (cont.). *Bull. d. Arch. e Stor. Dalmata*, 1898, pp. 25-36, 37-47; 2 pls.
- Dalbon**, Traité technique et raisonné de la restauration des tableaux, précédé d'une étude sur leur conservation. 140 pp. Paris, 1898.

- E. Drouin**, Les légendes des monnaies sassanides. *R. Arch.* XXXII, 1898, pp. 62-84, 169-202.
- G. Duplessis**, Catalogue de la collection des portraits français et étrangers conservés au département des estampes de la bibliothèque nationale. 2 vols. Paris, 1896-1897, Rapelly.
- C. de Fabriczy**, Studi e memorie riguardante l' arte italiana publicati nell' anno 1896 nelle principali riviste di storia dell' arte in Germania. *Arch. Stor. d. Art.* 1897, pp. 480-491.
- C. J. Ffoulkes**, Le Couronnement de la Ste. Vierge. *R. Art Chrét.* 1898, pp. 42-50, 117-126.
- L. H. Fischer**, Die Technik der Oelmalerei. iv, 118 pp. Vienna, 1898, G. Gerold's Sohn. 8vo.
- F. R. Friis**, Bidrag til dansk Kunsthistorie. No. 4. Kopenhagen, 1898.
- M. Gerlach**, Die Bronzeepitaphien der Friedhöfe zu Nürnberg. Photographische Naturaufnahmen, zusammengestellt und herausgegeben von Gerlach, mit textlichen Erläuterungen von H. Bösch. 13-17 Lfg. Vienna, 1898, Gerlach & Schenk.
- H. Grasberger**, Die Gemäldesammlungen im Kunsthistorischen Hofmuseum in Wien. 2 Ausg. Vienna, 1898, Graeser.
- P. Grisar**, Archeologia : 82. Il mosaico dell' oratorio lateranense di S. Venanzio. 83. Le recenti scoperte di Salona relative ai martiri rappresentati nel mosaico descritto, e primieramente i vescovi San Domnionio (coi compagni) e S. Venanzio. 84. Il vescovo S. Mauro nel mosaico Lateranense e sull' iscrizione trovata a Parenzo. 85. Gli scavi di Salona ed i martiri Anastasio settimo ed Asterio del mosaico. *La Ciriltà Cattolica*, Ser. XVI, Vol. XII, qu. 1142, pp. 211-223.
- Archeologia : 91-93. Della statua di bronzo di S. Pietro apostolo nella basilica Vaticana. *La Ciriltà Cattolica*, Ser. XVII, Vol. II, qu. 1150.
- W. Groff**, Notes complémentaires à l'étude de la sorcellerie ou le rôle que la Bible a joué chez les sorciers. *B. de l'Institut égyptien* [de Caire], 1897, pp. 67-81.
- Florence monumental. Ensembles et détails d'architecture. 108 phototypies. Paris, 1898, Guérinet.
- Venise et ses monuments. 64 phototypies. Paris, 1898, Guérinet.
- F. Haack**, Die königl. ältere Pinakothek zu München. Eine Auswahl von 75 Meisterwerken in Pigmentdrucken mit begleitendem Text. Munich, 1897. Verlagsanstalt F. Bruckmann. iv, 29 pp. Folio.
- O. Jozzi**, Supplemento alla Roma Sotterranea Cristiana del Comm. G. B. de Rossi. Roma, 1897. 40 pp.; 36 pls. Small folio.
- P. Lehfeldt**, Bau- und Kunstdenkmäler Thüringens. 25 Heft. Jena, 1897, G. Fischer.
- G. B. Lugari**, I vari seppellimenti degli apostoli Pietro e Paolo, confermati e chiariti dagli ultimi scavi. *Bessarione*, Siena, 1897. pp. 317-330; pls. i-iii.
- J. E. Matthew**, A Handbook of Musical History and Bibliography from St. Gregory to the Present Time. 498 pp. 8vo. New York, 1898, G. P. Putnam's Sons.

- G. Moretti, Relazione annuale dell' Ufficio Regionale per la conservazione dei monumenti in Lombardia. *Arch. Stor. Lomb.* 1898, pp. 121-206.
- H. Omont, Nouvelles acquisitions du département des manuscrits de la Bibliothèque nationale pendant les années 1896-1897. *Bibl. École Chartes*, 1898, pp. 80-135.
- P. Orsi, Di alcuni ipogei cristiani a Siracusa. *Römische Quartalschrift für christliche Altertumskunde und für Kirchengeschichte*, XI, 1897, pp. 475-495; pls. i-iii; 13 cuts.
- Rud. Pfeiderer, Die Attribute der Heiligen. Ein Alphabet. Nachschlagebuch zum Verständnis kirchl. Kunstwerke. vii, 206 pp. Ulm, 1898, Kerler.
- W. M. Ramsay, The Church in the Roman Empire before A.D. 170. 5th edition. London, 1898, Hodder. 534 pp.; map; cuts. 8vo.
- G. Ruggero, Annotazioni numismatiche italiane. *R. Ital. Num.* 1898, pp. 107-122.
- P. Savignoni, L' Archivio storico del comune di Viterbo (contin. e fine). *Archiv. Stor. Patr.* 1897, pp. 465-478.
- H. Schmölzer, Kunsttopographisches aus Süd-Tyrol. *Mith. Central-Comm.* 1898, pp. 51-56.
- V. Strazzulla, Museum Epigraphicum seu inscriptionum christianarum quae in Syracusanis catacombis repertae sunt corpusculum. Palermo, 1897. 8vo.
- Di alcuni elementi pagani nelle Catacombe e nella epigrafia cristiana. *Römische Quartalschrift für christliche Altertumskunde und für Kirchengeschichte*, XI, 1897, pp. 507-529.
- Strzygowski, Die christlichen Denkmäler Ägyptens. *Römische Quartalschrift für christliche Altertumskunde*, etc., XII, 1898, pp. 1-41.
- Cecil Torr, On Portraits of Christ in the British Museum. London, 1898, C. J. Clay & Sons. 14 pp. 8vo.
- P. Verneuil, L'Animal dans la Decoration. Libr. Centrale des Beaux Arts, Paris, 1897.
- Dictionnaire des Symboles, Emblèmes et Attributs, à l'usage des Artistes et Amateurs. Paris, 1897. 190 pp. 8vo.
- De Waal, Die Grabschrift der Philumena. *Römische Quartalschrift für christliche Altertumskunde*, etc., XII, 1898, pp. 42-54.
- J. Ward, Historic Ornament. Treatise on Decorative Art and Architectural Ornament, Pottery, Enamels, Ivories, Metal Works, Furniture, Textiles, Mosaics, Glass, Book Decoration. London, 1897. 428 pp. 8vo.

II. BYZANTINE AND MEDIAEVAL

- P. Addresshaw, The Cathedral Church of Exeter. London, 1898, George Bell & Sons.
- T. Allara, Ancora sui titoli di Teoderico. *R. Ital. Num.* XI, 1898, pp. 67-74.
- O. Aufieger, Mittelalterliche Kunstdenkmale Bambergs, Der Dom zu Bamberg, photographisch aufgenommen von A. Mit geschichtlicher Einleitung von A. Weese. 1 Abth. Munich, 1897, L. Werner. Folio with 30 pls.

- E. Babelon**, On the Rouyer collection of "jetons." *C. R. Acad. Insc.* 1898, pp. 101-103.
- A. Ballu**, Le monastère byzantin de Tébéssa. Paris, 1898, E. Leroux. 14 pls.; vi, 38 pp. Folio.
- Alfred Bassermann**, Dante's Spuren in Italien. Heidelberg, 1897, Carl Winter. 303 pp. 4to.
- E. Berger**, Beiträge zur Entwicklungs-geschichte der Maltechnik. 3 Folge. Quellen und Technik der Malerei des Mittelalters einschliesslich der van Eyck-Technik. xii, 281 pp. Munich, 1897. 8vo.
- S. Borghese e L. Bianchi**, Nuovi Documenti per la Storia dell' Arte Senese. Siena, 1898, Torrini. 702 pp. 8vo. \$3.
- A. Buscon**, Montmajour, Saint-Remy, Les Baux, in 'Voyage de la Société archéologique de Tarn et Garonne au Comtat-Venaissin et en Provence.' *B. archéologique et historique de la Société archéologique de Tarn et Garonne* [Montauban]. Tome XXV, 1897, supplément, pp. 55-65.
- Caron**, Trouvailles de monnaies du moyen âge à Delphes. *B.C.H.* 1897, pp. 26-39.
- Compte de Castellane**, Les monnaies d'argent du système flamand frappées à Tournai au nom de Charles VII. *R. Num.* 1898, pp. 103-115.
- Illustrated Series of English Cathedrals.** Isbister & Co., London. 16mo. \$0.50 per vol. Comprising:
- Winchester Cathedral.** By the Rev. Canon Benham. Illustrated by Herbert Railton.
 - Wells Cathedral.** By the Rev. C. M. Church, A.M. Illustrated by Herbert Railton.
 - Norwich Cathedral.** By the Very Rev. W. Lefroy, D.D., Dean of Norwich. Illustrated by Alexander Ansted.
 - Salisbury Cathedral.** By the Very Rev. Dean Boyle. Illustrated by Alexander Ansted.
 - Canterbury Cathedral.** By the Very Rev. Dean Freemantle. Illustrated by W. Lapworth.
 - Gloucester Cathedral.** By the Very Rev. Dean Spence. Illustrated by Herbert Railton.
 - Westminster Abbey.** By the Very Rev. Dean Farrar. Illustrated by Herbert Railton.
 - St. Alban's Abbey.** By the Rev. Canon Liddell. Illustrated by F. G. Kitton.
 - St. Paul's Cathedral.** By the Rev. Canon Newbolt. Illustrated by Herbert Railton.
 - York Minster.** By the Very Rev. Dean Purey-Cust. Illustrated by Alexander Ansted.
 - Ely Cathedral.** By the Rev. Canon Dickson. Illustrated by Alexander Ansted.
- H. Chabeuf**, L'Eglise de Rouvres. *R. Art Chrét.* 1898, pp. 104-107.
- D. Christison**, Early Fortifications in Scotland. Moats, Camps, Forts. London, 1898. 4to.

- C. Cippola, Pubblicazioni sulla storia medioevale italiana. *Nuor. Archiv. Ven.* 1897, pp. 389-440.
- G. Clausse, Les monuments du christianisme au moyen-âge. Les marbriers romains et le mobilier presbytéral. Paris, 1897, Leroux. x, 527 pp. 8vo.
- A. v. Cohausen, Die Befestigungsweisen der Vorzeit und des Mittelalters. xlv, 340 pp., with an atlas of 57 plates. Wiesbaden, 1898, C. W. Kreidel. 8vo.
- W. Creizenach, Kleine Beiträge zur Deutung italienischer Kunstwerke. *Rep. f. K.* 1898, pp. 58-59.
- L. Delisle, Note sur un manuscrit de saint Jérôme acquis à Lyon par la Bibliothèque Nationale. *Bibl. École Chartes*, 1898, pp. 136-140.
- Ch. Deprat, La basilique de Tébéssa. Les ruines d'El-akbia. *Mémoires de la Société archéologique de Constantine*, 1897.
- E. Dobbert, Zur Geschichte der altchristlichen und der frühbyzantinischen Kunst. *Rep. f. K.* 1898, pp. 1-27 and 95-111.
- L. Duchesne, Origines du culte chrétien. Étude sur la liturgie avant Charlemagne. 2d ed. Paris, 1898. viii, 535 pp. 8vo.
- F. Dulberg, Lucas van Leyden als Illustrator. *Rep. f. K.* 1898, pp. 36-46.
- H. Eirington, The Ancient Church of Bosham. *Reliquary and Illustrated Archaeologist*, 1898, pp. 82-90; 5 figs.
- R. Erculei, Oreficerie, stoffe, bronzi, intagli etc. all' Esposizione di arte sacra in Orvieto. Con introduzione di Com. Boito. 45 pp. with 51 cuts and 25 plates. Milan, 1897. Folio.
- L. de Farcy, La grande salle de l'évêché d'Angers. *R. Art Chrét.* 1898, pp. 202-206.
- Barr Ferree, French Cathedrals. Parts XIII, XIV. *Arch. Record*, VII. Nos. 3, 4.
- G. Rohault de Fleury, Note sur Saint-Apollinaire de Ravenne et les réprises en sous-œuvre du XVI^e siècle. *R. Art Chrét.* 1898, pp. 198-201.
- F. Geiges, Unser lieben Frauen Münster zu Freiburg im Breisgau. Freiburg, 1897. 68 pls.
- I. Giorgi, Appunti intorno ad alcuni manoscritti del Liber Pontificalis. *Arch. Stor. Patr.* 1897, pp. 247-312.
- E. Goethals, Le Mont Saint-Michel. 385 pp. with 12 pls. Brussels, 1897. 8vo.
- W. H. Goodyear, The Problem of the Leaning Tower of Pisa. *Arch. Record*, VII, 3, pp. 257-294.
- H. Graeven, Die Vorlage des Utrechtsalters. *Rep. f. K.* 1898, pp. 28-35.
- H. Grisar, Note archeologiche sulla mostra d' arte sacra antica a Orvieto. *N. Bull. Arch. Crist.* 1897, pp. 5-44.
- Una imitazione dell' Aposteleion di Costantinopoli a Roma nel VI secolo. *Civiltà Cattolica*, 1897, Vol. 2, pp. 267-479.
- Il muro aureliano di Roma e le croci bizantine sulle porte. *Civiltà Cattolica*, 1897, Vol. 3, pp. 201-206.
- Sainte Marie in Cosmedin. *R. Art Chrét.* 1898, pp. 181-197.

- H. A. Grueber and L. A. Lawrence**, The Balcombe Find. *Num. Chron.* 1898, pp. 8 fl.; pls. i-v. [Early English and Scottish coins from Edward I to Richard II, found at Balcombe, Sussex, and now in the British Museum. Description and commentary.]
- P. Grueber**, Die Kirchen zu Maria-Feicht und am Ulrichsberge in Kärnten. *Mith. Central-Comm.* 1898, pp. 107-108.
- A. Haseloff**, Eine thüringisch-sächsische Malerschule des 13. Jahrh. *Studien zur deut. Kunstges.* 9 Heft, 1897.
- F. Hermanin**, Alcuni avori della collezione del conte Stroganoff a Roma. *L'Arte*, 1898, pp. 1-11.
- C. H. B. Ivennell**, The Cathedral Church of Norwich. A Description of its Fabric and a Brief History of the Episcopal See. London, 1898, George Bell & Sons. 12mo.
- E. Kalinka and J. Strzygowski**, Die Kathedrale von Herakleia. *Jahreshefte d. Oesterr. Arch. Inst.* I, 1898, *Beiblatt*, pp. 3-28; 11 figs.
- J. P. Kirsch**, Die Aclamationen und Gebete der altchristlichen Grabschriften. Cologne, 1897. 79 pp. 8vo.
- F. X. Kraus**, Christliche Archaeologie 1896-1897. *Rep. f. K.* 1898, pp. 122-150.
- Geschichte der christlichen Kunst. Bd. II, Die Kunst des Mittelalters, der Renaissance und der Neuzeit. Erste Abtheilung: Mittelalter. Herder'sche Verlagshandlung, Freiburg im Breisgau, 1897. xii, 512 pp. 8vo.
- Dante. Sein Leben und sein Werk, sein Verhältniss zur Kunst und Politik. Berlin, 1897, G. Grote'sche Verlagshandlung.
- Kurth**, Die Mosaïkinschriften von Salonik. *Athen. Mith.* XXII, 1897, pp. 463-472.
- E. Lamin**, La Flore des grandes Cathédrales de France. Paris, 1897.
- Le Statuaire des grandes Cathédrales de France. Paris, 1897, E. Levy.
- S. P. Lambros**, Κατάλογος τῶν ἐν τῇ κατὰ τὴν Ἀνδρον μονῇ τῆς Ἁγίας κωδικῶν. Ἑπετηρίς τοῦ Πατριασμοῦ, 1898, pp. 136-244.
- A. G. Langdon**, Sculptured Norman Tympana in Cornwall. *Reliquary and Illustrated Archaeologist*, 1898, pp. 91-99; 4 figs.
- O. Marucchi**, Una nuova scena de simbolismo sepolcrale cristiano. *N. Bull. Arch. Crist.* 1897, pp. 103-112.
- F. Martin-Sabon**, Catalogue des photographies archéologiques faites dans les villes, bourgs et villages de l'île de France et dans les Provinces de Picardie, Normandie, Bretagne, Touraine, d'après les monuments, églises, châteaux, fermes, maisons, ruines, etc. Paris, 1897, Giraudon. 136 pp. 8vo.
- O. Mitus**, Jonas auf den Denkmälern des Christlichen Alterthums. *Ficker's Arch. Stud. z. chr. Alt. u. Mittelalter*. 1897, Heft 4.
- V. Mortel**, La mesure et les proportions des colonnes antiques d'après quelques compilations et commentaires antérieurs au XII siècle. *Bibl. École Chartes*, 1898, pp. 56-72.
- E. Müntz**, L'ancienne basilique de St. Paul-hors-les-murs. *R. Art Chrét.* 1898, pp. 1-19, 108-113.

- J. L. Myres**, Byzantine Jewellery in Cyprus. *Reliquary and Illustrated Archaeologist*, 1898, pp. 109-112; 6 figs.
- P. Orsi**, Chiese byzantine del territorio di Siracusa. *Byz. Z.* 1898, pp. 1-28.
- I. M. Palmarini**, Barisano da Trani e le sue porte in bronzo. *L'Arte*, 1898, pp. 15-26.
- J. P. Richter**, Quellenschriften der byzantinischen Kunstgeschichte. Ausgew. Texte über die Kirchen, Klöster, Paläste, Staatsgebäude und anderen Bauten von Konstantinopel. Vienna, 1897, Graeser. liii, 432 pp.
- P. Saccardo**, Les mosaïques de Saint Marc à Venise. Venice, 1897.
- F. Savio**, Di alcuni chiese di Milano anteriori a S. Ambrogio. *N. Bull. d. Arch. Crist.* 1897, pp. 163-173.
- F. Schneider**, Mittelalterliche Goldfibeln. Ein Fund aus dem Boden von Mainz. *Jb. Preuss. Kunsts.* 1897, pp. 170-180.
- G. Schön**, Mosaikinschriften aus Cilli. *Jahreshefte d. Oesterr. Arch. Inst. I.*, 1898, *Beiblatt*, pp. 29-36; fig.
- G. Schönermark**, Beschreibende Darstellung der älteren Bau- und Kunstdenkmäler des Fürstenthums Schaumburg-Lippe. Im Auftrage der fürstl. Hofkammer bearbeitet. vii, 143 pp., with 6 plates and 278 text illustrations. Berlin, 1897, W. Ernst & Sohn. 4to.
- J. O. Scott**, Blakeney Church Chancel. *Reliquary and Illustrated Archaeologist*, 1898, pp. 120-123; fig.
— Stained Glass Window in Newington Church. *Reliquary and Illustrated Archaeologist*, 1898, pp. 116; photograph.
- F. Sesselberg**, Die skandinavische Baukunst der ersten nordisch-christlichen Jahrhunderte, in ausgewählten Beispielen bildlich vorgeführt. Fol., with 26 plates. Nebst Textbd.: Die früh-mittelalterliche Kunst der germanischen Völker. Unter besonderer Berücksichtigung der skandinavischen Baukunst in ethnologisch-anthropologischer Begründung dargestellt. Berlin, 1897, E. Wasmuth. iii, 146 pp. Folio.
- Stückelberg**, Les titres de Théoderic. *R. Ital. Num.* XI, 1898, pp. 63-66.
- G. Stuhlfauth**, Die Engel in altchristlicher Kunst. *Ficker's Arch. Stud. z. Chr. Alt. u. Mittelalter*, 1897, Heft 3.
- W. D. Sweeting**, The Cathedral Church of Peterborough. A Description of its Fabric and a Brief History of its See. London, 1898, George Bell & Sons. 12mo.
- D. Tumiatri**, La chiesa dei Santi Abbondio ed Abbondanzio in Rignano Flaminio presso Roma. *L'Arte*, 1898, pp. 12-14.
- O. Wulff**, Die Sieben Wunder von Byzanz und die Apostelkirche nach Konstantinos Rhodios. *Byz. Z.* 1898, pp. 316-331; 2 cuts.

III. RENAISSANCE

John Belcher and **M. E. Macartney**, Later Renaissance Architecture in England: a Series of Examples of Domestic Buildings Erected Subsequent to the Elizabethan Period. To be Completed in Six Parts, Each containing 26 Plates. Folio. Parts I and II now ready. \$45 for the set.

- Luca Beltrami**, L' arte negli arredi sacri della Lombardia con note storiche e descrittive. Milan, 1897, Hoepli. 54 pp., with 80 heliotype plates. Folio.
- **Soncino**. La Torre Sporzesa, Santa Maria delle Grazie e Torre Pallavicina. Ricordi di storia e d' arte. Milan, 1898. 56 pp., with 64 plates. 8vo.
- Bernhard Berenson**, The Central Italian Painters of the Renaissance. London and New York, 1897. 210 pp. 8vo.
- G. de Blasis**, La chiesa e la Badia di S. Pietro ad Aram. *Arch. Stor. Nap.* 1898, pp. 211-250.
- Reginald Blomfield**, A History of Renaissance Architecture in England, A.D. 1500-1800. With 150 Illustrations from Drawings by the Author, and 90 Plates from Photographs and Old Prints and Drawings. London, 1898, 2 vols. Imperial 8vo. 50s. net.
- W. Bode**, Rembrandt. Beschreibendes Verzeichniss seiner Gemälde in den heliographischen Nachbildungen, Geschichte seines Lebens und seiner Kunst. Unter Mitwirkung von C. Hofstede de Groot. II Bd. Paris, 1898, Ch. Sedelmeyer. 181 pp.; 77 plates. Folio.
- G. Carotti**, Gli affreschi dell' Oratorio dell' antico Collegio fondato del cardinale Branda Castiglioni in Pavia. *Arch. Stor. d. Art.* 1897, pp. 240-275.
- Lionel Cust**, Albrecht Dürer. A Study of His Life and Work, with many illustrations. London, 1897, Seeley & Co. Royal 8vo. \$3.00.
- Berthold Daun**, Adam Kraft und die Künstler seiner Zeit. Berlin, 1897, W. Hertz. 140 pp., with 58 illustrations. 8vo.
- Carlo Decio**, Sopra due rarissime medaglie mediche milanesi. *R. Ital. Num.* 1898, pp. 125 ff.
- L. Dimier**, Benvenuto Cellini à la cour de France. *R. Arch.* XXXII, 1898, pp. 241-276.
- C. Drury and E. Fortman**, Maiolica. A Historical Treatise on the Glazed and Enamelled Earthenwares of Italy, etc., with plates, marks, etc. Oxford University Press, American Branch, New York, 1897. \$12.50.
- G. Ebe**, Die Schmuckformen der Monumentalbauten aus allen Stilepochen seit der griechischen Antike. VII Theil, 2, klassische Barockperiode, 191 pp.; 137 illustrations. VIII Theil, Rokoko und Klassizismus, pp. viii, 193-359; 133 illustrations. Berlin, 1897-1898. W. & S. Loewenthal. 4to.
- Francesco Ehrle e Enrico Stevenson**, Gli affreschi del Pinturicchio nell' Appartamento Borgia del Palazzo Apostolico Vaticano. Rome, 1897, Danesi.
- A. Flangieri de Candida**, Due bronzi di Giovan Bologna nel Museo Nazionale di Napoli. Naples, 1897.
- P. Flat**, Une troisième Vierge au Rocher. *Rev. Art Anc. et Mod.* I, No. 9 (1897).
- Gerspach**, Une adoration des rois mages. *R. Art Chrét.* 1898, pp. 20-23.
- Fresques récemment découvertes à Florence, Orvieto et Montefiascone; le nettoyage des anciennes fresques. *R. Art Chrét.* 1898, pp. 209-217.
- P. Grueber**, Die Wandbilder des heil. Christoph in Kärnten. *Mith. Central-Comm.* 1898, pp. 18-19.

- Gustav Gruyer**, L'art ferrarais à l'époque des Princes d'Este. Paris, 1897, Librairie Plon.
- A. Buhot de Kersers**, La numismatique moderne. Mélanges et documents; chronique. *R. Num.* 1898, pp. 116 ff.
- P. Kristeller**, Early Florentine Woodcuts. With an annotated list of Florentine illustrated books. London, 1897, Kegan Paul, Trench, Trübner & Co. 4to.
- R. Lanciani**, Il patrimonio della famiglia Colonna al tempo di Martino V (1417-1431). *Arch. Stor. Patr.* 1897, pp. 369-450.
- Konrad Lange**, Peter Flötner, ein Bahnbrecher der deutschen Renaissance. Auf Grund neuer Entdeckungen geschildert. Berlin, 1897, Grote. x, 180 pp. with 12 pls. and 47 cuts. Folio.
- K. Lechner**, Grabdenkmale in der Pfarrkirche zu Breitenwang (Tyrol). *Mith. Central-Comm.* 1898, pp. 92-96.
- Zur Baugeschichte der Stanislaus-Capelle im Dome zu Olmütz. *Mith. Central-Comm.* 1898, pp. 90-91.
- Leprieux**, On the Frame of the Diptych of Melun by Jean Fouquet. *B. Soc. Ant. Fr.* 1897, pp. 315-316.
- C. Löser**, Paolo Uccello. *Rep. f. K.* 1898, pp. 83-94.
- G. Ludwig**, Vittore Carpaccio, La Scuola degli Albanesi in Venezia. *Arch. Stor. d. Art.* 1897, pp. 405-431.
- F. Malaguzzi**, La Zecca di Bologna. *R. Ital. Num.* 1898, pp. 75-106.
- Alfredo Melani**, Palladio and his Work. *Arch. Record*, VII, 3, pp. 241-256.
- Modelli d' arte decorativa italiana, raccolti con diligenza e industria fra i disegni di maestri antichi della R. Galleria degli Uffizi. Milan, 1897. viii, 16 pp., with 50 pls. 4to.
- W. Milkowicz**, Zwei Fresco-Kalendar in den Bukowiner Klosterkirchen Woronetz und Suczawitz aus dem 16 Jahrhundert. *Mith. Central-Comm.* 1898, pp. 1-44.
- E. Müntz**, Les arts à la cour des papes Innocent VIII, Alexandre VI, Pie III (1484-1503), recueil de documents inédits ou peu connus. Paris, 1898, Leroux. 303 pp.; 10 pls.; 94 cuts. 8vo. [The plates contain among other things five Roman views from the Codex Escorialensis, after photographs by J. Ficker.]
- F. Novati**, Scoperte artistiche. Argo nel Castello Sforzesco di Milano. A proposito d' un dipinto recentemente scoperto ed attribuito a Leonardo. *Emporium*, 1898, pp. 154-160.
- O. Ollendorf**, Der Laokoon und Michelangelo's gefesselter Sklave. *Rep. f. K.* 1898, pp. 112-115.
- Claude Phillips**, The Earlier Work of Titian. Portfolio monograph, No. 34. London, 1898.
- The Later Work of Titian. Portfolio monograph, No. 36. London, 1898.
- C. Ponsouilhé**, Les Saints par les Grands Maîtres. Hagiographie et iconographie des Saints de chaque jour. Tours, 1897. 416 pp., with 147 cuts. 4to.

- E. Rocchi**, Baccio Pontelli e la Rocca d' Ostia. *L' Arte*, 1898, pp. 27-31.
- D. Sant' Ambrogio**, Un importante sarcofago in Milano dello scultore Marco d' Agrate. *Il Politecnico*, January, 1898.
- R. A. M. Stevenson**, Peter Paul Rubens. Portfolio monograph, No. 35. London, 1898.
- J. Strzygowski**, Das Werden des Barock bei Raphael u. Correggio, mit einem Anhang über Rembrandt. Strassburg, 1898, Heitz. 140 pp.
- I. B. Supino**, Beato Angelico. Florence, 1897, Fratelli Alinari. 200 pp. 8vo.
— Beato Angelico. Traduit de l'italien par J. de Crozals. Fischbacher, 1898. Gr. in-8 avec 15 héliograv. et 73 fotogr. 12 fr.
- H. Thode**, Mantegna. Leipzig, 1897, Velhagen und Klasing.
- A. Venturi**, Disegni del Pinturricchio per l' appartamento Borgia in Vaticano. *L' Arte*.
- Leonardo da Vinci**, Il Codice Atlantico nella Biblioteca Ambrosiana di Milano, riprodotto e pubblicato della Regia Accademia dei Lincei sotto gli auspici e col sussidio del Re e del Governo. Fasc. XIII-XIV. Milan, 1897.
- O. Vitalini**, Scudo d' oro inedito di Alberico I. Cibo. *R. Ital. Num.* 1898, pp. 123 f.
- Ludwig Volkmann**, Iconografia Dantesca. Die bildl. Darstellungen zur Göttlichen Komödie. Leipzig, 1897, Breitkopf & Härtel. pp. viii, 179, with 17 pls.
- Volynski**, A la recherche de Leonardo da Vinci. *Messenger du Nord*, December, 1897.
- H. D. Westlake**, On the Authentic Portraiture of S. Francis of Assisi. London, 1897. 31 pp., with pls. 4to.
- G. C. Williamson**, Portrait Miniatures from the Time of Holbein, 1531, to that of Sir William Ross, 1860. London, 1897. 190 pp. 8vo.
- M. Wingenroth**, Die Jugendwerke des Benozzo Gozzoli. Heidelberg, 1897.
- K. Woermann**, Handzeichnungen alter Meister im Königl. Kupferstichkabinet zu Dresden. Munich, 1898, F. Hanfstaengl. 6 Mappe. Pp. 61-72 of text and 25 pls. Folio.
- Warwick Wroth**, Tickets of Vauxhall Gardens. *Num. Chron.* 1898, pp. 73 ff., pls. vi-viii.

Archaeological
Institute
of America

NINETEENTH ANNUAL REPORT OF THE COUN-
CIL OF THE ARCHAEOLOGICAL INSTITUTE
OF AMERICA

To the Members of the Institute:

The organization of the Council of the Institute was materially modified by action taken at the annual meeting held on May 8, 1897. The occasion and purpose of the changes then adopted are stated in the Eighteenth Report of the Council. Even a single year's experience shows that this reorganization was wisely effected. The Affiliated Societies of the Institute and the Schools of Classical Studies at Athens and Rome have been brought into more active relation with the government of the Institute, without diminishing the independence of their control of their own special interests; the constitution of the Council has been made more stable, with the assured result that its members will hereafter be better acquainted with the traditions of its administration and more likely to maintain a settled policy; important interests are now cared for by special representatives in the Council; and the conduct of the business of the Institute proves to have been in no way impeded by the increase in the membership of the Council from twenty-two in 1896 to forty-one in 1898.

The present report covers the period from September 1, 1897, to August 31, 1898. The annual meeting of the Council was held in New York on May 14, 1898. The Managing Committees of the Schools of Classical Studies at Athens and Rome met in the same city on the two preceding days. By the kindness of the President and Board of Trustees of Columbia

University, all these meetings were held in the commodious rooms of its Department of Architecture, and the officers of the Institute and of the Schools desire to express their grateful acknowledgment of this courtesy.

The attendance at the annual meeting of the Council was large, and its members manifested strong interest in its business. The discussions, though harmonious, were vigorous; and the questions debated were considered, with obvious advantage, from many different points of view. Councillors were present from ten States of the Union. This meeting was attended also by members of the Managing Committees of the Schools at Athens and Rome, who were invited to sit with the Council and to participate, without vote, in its discussions. Reports were made orally by some of the Presidents of the Affiliated Societies, or by their representatives, on the work of the Societies during the preceding year, and constituted a pleasant and instructive feature of this meeting. Local conditions vary, and questions of policy are viewed differently in different parts of the country; it is of obvious advantage that the Council as a body should be made acquainted with the opinions that prevail in all the Societies.

The increase in the numbers of the Council made it necessary to provide at the time of its reorganization for the appointment of an Executive Committee. This Committee consists of the President of the Institute and of four other members who act as his advisers in conducting the business of the Institute when the Council is not in session, and assist him in preparing the programme of business to be brought forward at the annual meeting. The Executive Committee consisted in 1897-98, besides the President, of Mr. Charles L. Hutchinson of Chicago, Mr. James Loeb of New York, Dr. William Pepper of Philadelphia, and Professor Thomas D. Seymour of New Haven, and the President desires to make acknowledgment of the assistance that he has received from these gentlemen and of their readiness at all times to consider questions relating to the interests of the Institute.

The Council announces with pleasure the establishment of a Society at New Haven with thirty-eight members. The officers of the New Haven Society are President Timothy Dwight, President; Professor Simeon E. Baldwin and Professor B. Perrin, Vice-Presidents; and Professor Horatio M. Reynolds, Secretary and Treasurer.

The Council has elected as Honorary Members of the Institute Professor Percy Gardner, M.A., Litt.D., F.S.A., Professor of Classical Archaeology and Art in the University of Oxford, and Professor R. C. Jebb, Litt.D., Ph.D., LL.D., D.C.L., Regius Professor of Greek and Fellow of Trinity College, Cambridge, M.P. for the University, and President of the Society for the Promotion of Hellenic Studies.

The following report was laid before the Council at the annual meeting held in 1898, in behalf of the editors of the *Journal of the Institute*, by the Editor-in-Chief, Professor John H. Wright:

Since the last meeting of the Council, the constitution and work of the Editorial Board have been placed upon a more satisfactory basis. The Board is now made up of representatives of the two Schools as Associate Editors, — Professor J. R. Wheeler and Professor Marquand, — with Professor Fowler, elected by the Council, as third Associate Editor; the President of the Institute, and the Chairmen of the Managing Committees of the two Schools, as Honorary Editors; and an Editor-in-Chief.

The importance of the department of archaeological news, discussions, and bibliography has been recognized by the editors, and at the request of the Editorial Board the Council invited Professor Fowler to take charge of this department. In his work he receives the valued aid of Miss Mary H. Buckingham, for Classical Archaeology; Professor J. C. Egbert, Jr., for Roman Epigraphy; Professor E. T. Merrill, for Roman Archaeology; Professor J. M. Paton, for Classical Archaeology; Mr. G. N. Olcott, for Numismatics; Dr. G. A. Reisner, for Oriental and Egyptian Archaeology; and Professor H. W. Smyth, for Greek Epigraphy.

The large list of exchanges of the *Journal*, which is constantly increasing, has greatly facilitated the work of this department. The Editors believe that the several unique features of this part of the *Journal*, — the classified bibliography of current archaeological literature, the carefully digested summaries of important archaeological discussions and miscellaneous notes of news and discoveries, all prepared by specialists in their several fields, — will give the *Journal* a significant place among the archaeological publications of the time.

In accordance with the purpose of the Board, as expressed in the first Editorial Announcement, to give American Archaeology greater prominence in the future, the Editors unite in recommending the election of Professor Henry W. Haynes as Associate Editor for American Archaeology.

The publishers of the Journal in New York are the Macmillan Company, but the periodical—for postal purposes—is published also at Norwood, Mass., where it is printed. The list of subscribers, of members of the Institute, and other persons entitled to receive the Journal is in charge of the Secretary of the Institute.

The problem of the proper separation of the scientific contents of the Journal from matter of merely local or temporary interest has offered difficulties to the Editors. By the relegation to Appendixes,—with a paging of their own, in the form of Bulletins,—of all lists of names, financial statements, regulations, and similar material, and by the reservation of the pages of the Journal proper for scientific papers, and for reports relating to the scientific activity and aims of the Institute and the two Schools of Classical Studies, it is believed the problem has been solved, at least in large part.

The expense of publishing a periodical of the scope and nature of the Journal is of necessity great. Not only are the illustrations of all sorts that must appear in it,—plates, cuts, facsimiles, etc.,—in themselves costly, but the various papers to be printed are commonly of so recondite and complex a character as to demand skilful compositors and to tax the typographical resources of the best equipped establishment, and these requirements involve large expenditure. Little return can be expected from an increased subscription list or through advertisements. A large item of expense, which will be much reduced hereafter, has been that for postage. The postal authorities for a long time were reluctant to grant the Journal the postal privileges usually granted to periodicals, but at last an arrangement was perfected,—by a transfer of the nominal place of publication from New York to Norwood,—by which these privileges were secured.

The Editors beg leave finally, as a part of their report, to refer the Council to the five numbers of the Journal that have already been issued.

The present number completes the second volume of the Journal, for the calendar year 1898. For reasons stated in the last report of the Council, the publication of the first volume was of necessity long delayed; but the determined energy of the Editor-in-Chief and of the Associate Editors has overcome the most stubborn difficulties, and the first number of the third volume of the Journal, for 1899, will be published immediately and the following numbers at the appointed times. The patient persistence of the Editors in dealing with many perplexing questions has been equalled only by their high conception

of what such a publication should be and by their skill in achieving their ideal. The Journal has been warmly welcomed both in this country and in Europe, and has already taken its place as a scientific publication of high character. The Institute has thus secured an honorable and satisfactory means for the regular issue of all its publications, except those of unusual size and cost.

The expense of publishing the Journal is heavy, for reasons stated in the report submitted by the Editors; but it will probably be possible to reduce somewhat the cost of subsequent volumes. The Journal is supported by subscriptions, by an annual contribution of eight hundred dollars from each of the Schools of Classical Studies, and by a yearly appropriation made by the Council. The Secretary of the Institute, Dr. Clarence H. Young, reported to the Council at its last meeting that the number of subscribers was then two hundred and fifty-seven.

The *Journal of the Institute*, which has now completed two volumes, by an arrangement made between the Council and the *American Journal of Archaeology, First Series*, replaced and succeeded that Journal, and received its copyright, subscription list, and exchanges. The Council had made an annual contribution to the support of the *American Journal of Archaeology, First Series*, from its foundation, and received and published annually the report of its business manager. His final report for the eleventh volume is here added, for purposes of record.

To the Council of the Archaeological Institute of America:

Sirs, — I beg to submit the following statement of accounts of the *American Journal of Archaeology, First Series*, for 1896.

<i>Receipts</i>	
From Institute:	
Appropriation	\$1600.00
Cretan Expedition Plates	468.00
Chicago Vase drawing	10.00
From Subscriptions	\$2078.00
Sale of Back Numbers	995.36
Miscellaneous	106.07
	15.13
	<hr/>
	\$3194.56

Expenses

Printing Vol. XI	\$1688.33
Index Account	93.74
Plates (including Cretan)	765.33
Postage	124.90
Office and Miscellaneous Expenses	656.78
	<hr/> \$3329.08

This leaves a deficit of \$134.52.

Respectfully submitted,

May 14, 1898.

ALLAN MARQUAND, *Business Manager.*

The Secretary of the Institute made a report at the meeting of 1895 on the former publications of the Institute and of the School at Athens, now stored at the Norwood Press. The report states in detail the number of each of the publications now in stock, and the value of each set estimated on the basis of the advertised price of each publication. The estimated value of the total stock, as reported, was \$7336.25.

The Council herewith submits the reports for 1897-98 of the Chairmen of the Managing Committees of the Schools at Athens and Rome, with the reports made to these committees for the same year by the Directors of the Schools. The reports made to the Managing Committees by the Professors and Lecturers in the Schools, which have sometimes been published separately, are now combined with those of the Chairmen and Directors, in order to avoid repetition of statement. The reports submitted give a full and satisfactory account of the activity of each School both in this country and abroad.

Fellowships were first established in these Schools in 1895-96, two in Greek Archaeology at the School at Athens, and two in Roman Archaeology and one in Christian Archaeology at the School in Rome. The first four have each an annual value of six hundred dollars; the fellowship in Christian Archaeology, of five hundred dollars.

These fellowships are administered with wisdom and care, and sufficient time has elapsed since they were established to

make it possible to judge whether the Institute and Schools are justified in this annual outlay of twenty-nine hundred dollars.

All Bachelors of Arts of universities and colleges in the United States are eligible to these fellowships, and other American students are admitted to candidacy, if they possess equal attainments. The object of this liberal provision is to secure the greatest possible number of worthy applicants. The fellowships are awarded after competitive examination. The examinations are conducted by standing committees, which make widely known each year the conditions under which the fellowships are awarded, and conduct the examinations with skill and success. The examinations are searching, as the papers give evidence. (See Appendix, pp. 101-114.) The holders of these fellowships are enrolled as regular members of the School to which they are attached, and are required to pursue their studies under the supervision of its Director during the full school year of ten months. In addition to his general studies, each holder of a fellowship is required to prosecute a definite subject of special research, and to present a paper embodying the results of his investigation. The holders of the fellowships may be candidates for reappointment.

The beneficial results of the establishment of the fellowships are already apparent. In order to pass the examinations successfully, candidates must have an exact and thorough knowledge of the elements of archaeology. The fellows, therefore, do not enter upon their work at the School as beginners, but are already possessed of a knowledge of at least the first principles of their subject; and since the requirements they must meet as students are rigorous and exacting, the standard both of acquirement and of study at the School has been raised for all students. Again, the desire of students to be candidates for these fellowships when they leave the universities has created the demand for instruction in the elements of classical archaeology at home, and some colleges are endeavoring to meet this demand. This is a fact of capital importance: the estab-

lishment of the fellowships has directly promoted the study of an important subject that has been neglected in American colleges.

The Council, therefore, has received with special satisfaction the announcement by the Chairman of the Managing Committee of the School at Athens of the foundation of the Agnes Hoppin Memorial Fellowship at that School, with a yearly income of one thousand dollars. (See p. 481.) The generous founders of this fellowship are all intimately acquainted with the conditions of life and work in the School at Athens from personal observation; one of them, Dr. Hoppin, has been a student and lecturer at the School, was one of those who conducted the excavations at the Argive Heraeum in 1892-95, and will have an important part in publishing the results of these excavations. The choice of this particular form of beneficence is, therefore, an intelligent expression of approval of the course of the Institute and Schools in establishing fellowships for the benefit of students.

At the annual meeting of the Council held in 1897, a committee consisting of Professor John H. Wright and the President of the Institute was appointed to confer with the committee in charge of the projected American School of Oriental Study and Research in Palestine. The conference was held and the two committees adopted a report, with recommendations, to be made to the Council at its annual meeting in 1898. A letter addressed to the President of the Institute by Professor J. H. Thayer, the Chairman of the Committee in charge of the School in Palestine, was at that time read to the committee as follows:

I am sorry to find that it will not be convenient for me to attend as your guest the meeting of the Council of the Institute which is to be held in New York next Saturday, and to express there, as the accredited representative of the Society of Biblical Literature and Exegesis, that Society's hearty consent to the proposal to place the projected "School for Oriental Study and Research" in a relation to the Institute similar to that now held by the Schools at Athens and Rome.

Were I present, I should beg leave to urge the claims of the new School upon the interest and assistance of the Institute for many reasons. A few

suggestions of the kind I will take the liberty here to set down, leaving it to your kindness and discretion to communicate them to the Council should opportunity offer.

The chief of these suggestions lie wrapped up in the fact that the land of Palestine is not only the birthplace of the religion which has mainly moulded modern thought and life, but—as the ancient thoroughfare between the East and the West—was for centuries the meeting-place of two distinct types of civilization. There Greece and Assyria confronted one another. We smile at the ancient Jewish conceit which held the wisdom and even the cultus of Greece to be borrowed from Moses. But such facts as have been arrayed by Dieterich in his *Nekyia* and Gunkel in his *Schöpfung und Chaos* (to name only two of the recent publications) pique curiosity, and start the suggestion whether there were not broader relations between the ancient peoples than it has been the fashion to assume; and whether Palestine, as an intermediary between Eastern and Western thought, may not help—when its buried secrets have been brought to light—to coördinate facts which now seem to be antagonistic.

But apart from all recondite problems, such discoveries as the Mesha stele, the Temple tablet, the Tell-el-Hesi cuneiform tablet, not to mention the Letters from Palestine among the Tell-Amarna tablets, are specimens of the contributions to history and linguistics which it is not over-sanguine to anticipate. Competent judges look for much light upon the Graeco-Roman period from excavation in such localities as Jericho and Samaria. The Biblical history and literature are coming to be studied like those of other ancient nations; viz. in relation to their development and environment. The careful examination of local conditions is consequently assuming new importance for every one interested in the Sacred texts.

Further: a museum is already acknowledged to be as serviceable in the study of the life and achievements of the Semitic peoples as in the case of the Greek, Latin, or German. The coins, inscriptions, vases, architectural and other monuments, the geological specimens and fauna and flora, which constitute the equipment of such a museum, are mainly as yet to be gathered by the explorer and the excavator.

The European nations have already begun to recognize the importance of such researches as the projected School is designed to stimulate and conduct. The "Palestine Exploration Fund" of England has been engaged for nearly a generation in prosecuting them; and its published "Quarterly Statements" run back to 1869. For twenty years, too (since 1878), the German *Palaestinaverein* has issued a similar publication. Stimulated by the extraordinary results of the Babylonian expedition of the University of Pennsylvania (as those results have been set forth by Dr. Peters and especially by Professor Hilprecht), and also by the French excavations at Tello, a voluntary association (the "Deutsche Orient-Gesellschaft") has been recently formed by the scholars of Germany, and on its behalf two explorers have been making preliminary investigations in Mesopotamia and Babylonia since last December. Just such a School as we are planning has already

been established by French Dominicans at Jerusalem. It is designed to be especially a training-place for Professors; and its *Revue biblique*, published quarterly at Paris, is already in its seventh year and commands the attention of the scholarly world.

The English explorations (for the resumption of which at Gath, one of the five royal cities of the Philistines, a permit has just been issued by the Porte) will not only afford our students gratuitous opportunities of witnessing operations in the field, but furnish problems for study in many lines; while the Dominican School, which is said to be hospitable to scholars of a different faith, may be expected to contribute something by way of incentive and fellowship to our establishment.

It is hardly necessary to recall the fact that in former days America took an advanced place in Palestinian research. Lieutenant Lynch's "Narrative" of the Expedition fitted out by our government more than half a century ago to explore the Jordan and the Dead Sea is still of interest; while the "Researches" of Edward Robinson and Eli Smith, the record of "manners and customs" by Thomson and Hackett, the description of antiquities and scenery by Merrill, and more recently the book of Post on the flora, have won fame for their authors and been helpful to students the world over. Ought the present to be content with past laurels!

Moreover, as Americans we possess certain peculiar advantages for the contemplated work. Sons of our missionaries, who possess a vernacular knowledge of Arabic and of the people and usages of the country, to which knowledge a training in American colleges has been added, can, it is believed, be easily enlisted in the service of the School. The intelligence and efficiency of such helpers are exemplified by Dr. Bliss, the official explorer to the English "Palestine Fund." Moreover, the services of scholarly missionaries themselves—known and respected now throughout the country more than ever by reason of their recent relief work—can be had on vacation tours of exploration at a merely nominal cost.

The present time, too, is opportune for carrying our schemes into effect, owing to the recent reappointment as consul at Jerusalem of Dr. Selah Merrill, who, as a specialist in archaeology and a member both of the Society of Biblical Literature and of the American Oriental Society, will gladly place his official influence at the service of the School. Professor Hilprecht, too, who has taken a keen interest in the project from the first, is confident that as one of the curators of the Museum at Constantinople he can further its designs.

The School can hardly prudently be set in motion, even in a very modest way, without an assured annual income of twenty-five hundred dollars. Nearly one-half that amount has already been secured, mainly by pledges of one hundred dollars a year for five years from the leading Divinity Schools of the country. It is hoped that the treasury of the Institute will enable it to supplement these pledges.

The widespread and growing interest of the friends of the Bible in whatever elucidates that Book guarantees a sympathetic response to the School's

appeal for support as soon as by achievement it shall have demonstrated its right to be. Will not a subsidy from the Institute that shall insure this result raise up friends for the Institute itself in circles it would not otherwise be likely to reach, and so prove in the end to be a profitable investment? An explorer and archaeologist of distinction remarks in a letter to me: "I had almost made up my mind that I could not afford to be a member of the Archaeological Institute at ten dollars a year; but if the Institute is to take this School, I shall at once pay up my dues."

This letter and the recommendations of the committee provoked a spirited discussion in which many members of the committee showed hearty personal interest in the establishment of the School in Palestine. The Council, by unanimous vote, then expressed its approval of the proposals of the joint committee; authorized the Executive Committee of the Council to effect the union of the proposed School with the Institute upon conditions similar to those under which the Schools at Athens and Rome are affiliated with the Institute; and agreed, if the union should be effected, to guarantee to the School in Palestine aid to the amount of five hundred dollars for the year 1899-1900. The appropriation was made for this year, and not for the year immediately following the meeting of the Council, because the gentlemen who had proposed the establishment of the School did not think it possible to organize it in the autumn of 1898. The approval of the purpose and plan of the School by the Council was so hearty and general that there can be no doubt that it will receive not only an annual appropriation for a period of years by vote of the Council, but also the individual support of its members.

The Council considered not only the preceding and other means of furthering the study of Oriental archaeology, but also the possibility of taking part in the investigation of antiquity on the continent of North America. The Government of the United States and individuals, however, have displayed such activity in making these investigations as to render it difficult for the Institute, with its limited means, to enter the field. But lively interest was manifested by the members of the

Council in this department of archaeology, and the standing committee appointed at the annual meeting in 1897, to consider the feasibility of the resumption by the Institute of explorations in America, recommended through its chairman, Professor J. R. Wheeler, the election to the Council of a member who should distinctly represent the interests of American archaeology. The Council added the President of the Institute to the standing committee, and requested the committee to take the steps necessary to carry its recommendation into effect. Furthermore, on the recommendation of the Board of Editors of the *Journal*, the Council unanimously invited Professor Henry W. Haynes to serve as Associate Editor in charge of the department of American archaeology. The Editors hope that the *Journal* may become more and more the medium of publication of the results of investigations, explorations, and excavations in this attractive field, especially from the point of view of the archaeology of art.

The Executive Committee, at the last annual meeting, submitted to the Council for its consideration a proposal for a renewal of the contract with owners of property in the vicinity of the great inscription at Gortyna in Crete, conferring right of excavation. After consideration, on recommendation of the Committee, the Council voted that it was not advisable to accept this proposal. This action was taken with regret. Crete is now undoubtedly one of the most promising fields for exploration in the ancient world; but the means of the Institute are limited, and the Council determined that it was not wise to assume new obligations until the successful conclusion of the excavation of ancient Corinth had been assured. This is an undertaking that will tax the resources of the treasury of the School at Athens to the utmost; but the satisfactory results of the excavations made in the spring of 1898 (see p. 485) show that this site was wisely chosen, and encourage the Managing Committee of the School to prosecute their task with vigor.

The Council has successfully put into effect the plan, announced in its last report, by which it provides courses of lectures each winter before the Affiliated Societies of the Institute. Under this arrangement the most of the Societies were addressed during the past year by Professor William W. Goodwin, Eliot Professor of Greek Literature in Harvard University, on Recent Discoveries at Ancient Troy, and on Mycenae; by Professor Minton Warren, of the Johns Hopkins University, on The Light Thrown by Latin Inscriptions on Ancient Life; and by Professor Percy Gardner, Professor of Classical Archaeology and Art in the University of Oxford, on Greek Coins in Relation to History, The Athenian Acropolis as a Background to History, Greek and Roman Portraits, The Sarcophagi of Sidon, and Archaeology in Relation to History. The Council was particularly gratified to welcome Professor Gardner as the guest of the Societies. He is the first foreign scholar to address them by invitation, and he inaugurated most happily a feature of the plan devised by the Council that is likely to become permanent.

The President of the Institute and the Chairmen of the Managing Committees of the Schools at Athens and Rome accepted an invitation to attend a Conference of Classical Teachers held at the University of Michigan in March, and addressed the Conference on the work and plans of the Institute and Schools.

The income of the Institute from fees of annual members, sales of publications, and interest on deposits in 1895-96 was \$4111.67; in 1896-97, \$5291.40; in 1897-98, \$7427.24. The income from fees alone in these years was, respectively, \$4060.30, \$4554, \$6542.13. The sums last named are the total receipts from fees, less the sums deducted by the treasurers of the Affiliated Societies for local expenses, which under the Regulations must not exceed ten per cent of the sums collected by them.

The increase in income is due mainly to increase in the number of members paying an annual fee. The Secretary of the Institute reported that the members of the Institute, at the

time of the publication of the Eighteenth Report of the Council, numbered one hundred and twenty-four Life Members and four hundred and ninety Annual Members,—a total of six hundred and fourteen. Since that time four Life Members and two hundred and fifteen Annual Members had been added, making a total increase of two hundred and nineteen members, and a total membership of eight hundred and thirty-three,—the largest in the history of the Institute. Seven hundred and five of these are Annual Members, each paying a yearly fee of ten dollars.

The representatives of the Societies and other Councillors present at the meeting expressed their strong belief that a vigorous and persistent attempt should be made still further to increase the membership of the Institute. Each Society now has a standing committee on membership; and the Council hopes that during the year 1898-99 renewed efforts will be made by the Societies to enlarge their numbers. Such united efforts would probably bring the total number of Annual Members of the Institute up to one thousand by the time of the next annual meeting of the Council. With the income that would then be received from yearly fees, the Institute would be enabled to prosecute its work with confidence.

For the COUNCIL,

JOHN WILLIAMS WHITE, *President*.

American School
of Classical Studies
at Athens

SEVENTEENTH ANNUAL REPORT OF THE
MANAGING COMMITTEE OF THE AMERICAN
SCHOOL OF CLASSICAL STUDIES AT ATHENS

To the Council of the Archaeological Institute of America:

GENTLEMEN,— I have the honor to submit to you the Report for 1897-98 of the Managing Committee of the American School of Classical Studies at Athens, and that of the Director, Professor Rufus B. Richardson.

Since the School exists chiefly for the sake of its students, and since their number and proficiency are in a way a test of its usefulness and of the advance of the science of classical archaeology in our country, we may congratulate ourselves that the number of its students during the past year was as large as it had ever been (indeed larger than ever before, except in 1895-96), and that the standard of maturity and attainment was higher. Four of the eleven students of the School had previously received the degree of Ph.D.; another had attended lectures on classical archaeology, in German universities, for six semesters; one other had been at the School for three years, and three others had been in residence there for one year; one other had gained a fellowship of the School by showing her fitness in a difficult examination; and the eleventh had been a graduate student at Yale University for a year, and had received its Soldiers' Memorial Fellowship. When we compare the equipment of this body of scholars with that of the students of the early years of the School, we may congratulate ourselves on the advance which has

been made. Clearly American students have better opportunities than ten years ago to prepare themselves at home for archaeological work in Greece. Manifestly, too, the guidance needed by them, and the opportunities open to them in Athens, are different from those of fifteen, or even ten, years ago. For the change which has taken place we can give the praise largely (if not mainly) to our School. American students now exceed in number those of any other nationality in Greece, and their work—for which but a few years ago we were apologetic, because of the elementary character of much of it—is in every way honorable.

Doubtless our School owes its success in great part to the favorable disposition toward it of our universities and colleges; and this, in turn, is due principally to the close connection which has been happily maintained, from the foundation of the School, between it and institutions of higher learning (especially the "supporting colleges") at home.

Professor Henry Drisler, LL.D., of Columbia University, after a long and honorable term of service to classical philology and to his university, died on November 30, 1897. He had been a member of our Managing Committee since 1882. His successor in the Jay Professorship of Columbia University, Professor Edward Delavan Perry, Ph.D., has been chosen to his place as a member of the Committee.

Smith College has joined in the support of the School at Athens, and Professor Henry M. Tyler, M.A., has been elected, as its representative, a member of the Managing Committee.

Miss Ellen F. Mason, of Boston, who has well proved her interest in the School and in classical studies generally, has been invited to be a member of the Committee.

Professor Alfred Emerson has been reëlected Professor of Archaeology of the School at Athens, for the year 1898-99. The term of service at Athens of Professor Smyth, of Bryn Mawr College, has been postponed, at his desire, until 1899-1900.

Miss Professor Chapin, of Wellesley College, has consented to serve as Lecturer on Greek Literature for the year 1898-99.

The Committee takes great pleasure in reporting the establishment, for three years, of a fellowship in the School by Mrs. Courtland Hoppin, Miss Sarah Hoppin, and Dr. Joseph Clark Hoppin, with an income of \$1000 a year. The incumbent is to be appointed in accordance with the conditions which are stated in the following circular on the fellowships of the School, which has been issued by the Committee on Fellowships:

Hereafter the examinations for fellowships will be held two months earlier than in previous years, in order that candidates may be subjected to no inconvenient delay in the arrangement of their work for the following year.

The Managing Committee of the School at Athens will award, in the spring of each year, two fellowships in Classical Archaeology. The awards will be made chiefly on the basis of a competitive written examination, but other evidence of ability and attainments on the part of candidates will be taken into consideration. The examination is open to Bachelors of Arts of any College or University in the United States and to other American students of similar attainments. These fellowships yield \$600 each, and will be held for the following School year. Like the other privileges of the School, these fellowships are open to women as well as to men.

The examination will be held on Thursday, Friday, and Saturday, of the third week in March, at the American School at Athens, at the American School in Rome, and in America at any of the universities and colleges which are represented on the Managing Committee of either School. The Committee will consider applications for examinations at other places also. The award of the fellowships will be made as soon after the examination as practicable, and notice thereof will be sent to all candidates immediately. This notice will in all probability be mailed not later than May 1. The income of these fellowships will be paid in three instalments of \$200 each, on August 15, January 15, and June 1.

A third fellowship, with an annual income of \$1000, to be called the "Agnes Hoppin Memorial Fellowship," has been established by Mrs. Courtland Hoppin, Miss Sarah Hoppin, and Dr. Joseph Clark Hoppin, available for the three years 1898-99, 1899-1900, and 1900-01. This fellowship will be awarded, at the discretion of the Committee, to any woman who, in the opinion of the Committee, shall seem from her previous record to be worthy of receiving it, without the requirement of an examination. Candidates should present to the Committee evidence of work performed. In general, preference will be given to a candidate who has already spent a year as a student in the School at Athens, and in particular to a candidate who has held one of the fellowships of the School, but no one can hold this fellowship for more than one year.

Fellows of the School are advised to spend the summer preceding their year at Athens in study in the museums of Northern Europe. They will be

enrolled as regular members of the School, and will pursue their studies under the supervision of the Director of the School for the full School year, from October 1, to August 1, in Greek lands. With the consent of the Director, however, they may reside for any two months of this time at the American School of Classical Studies in Rome, under the guidance of the Director of that School; and with the consent of the Director and of the Chairman of the Managing Committee they may pursue special studies elsewhere than in Greek lands during the months of June and July, provided such studies are supplementary to work already begun in Athens. Twice in the year, namely on February 1 and June 1, each Fellow will make report to the Chairman of the Committee on Fellowships concerning the use which he has made of his time. After the completion of the year, each Fellow will furthermore present to the Managing Committee a thesis embodying some important part of his year's work.

Fellows are subject to no fee for tuition. The men who are holders of fellowships will be allowed to occupy furnished rooms in the School on payment each of \$20 per annum.

Each candidate for one of the two first-mentioned fellowships must announce his intention to offer himself for examination. This announcement must be in the hands of the Chairman of the Committee on Fellowships, Professor Benjamin I. Wheeler, Ithaca, N.Y., not later than February 1. Its receipt will be acknowledged, and the candidate will receive a blank for him to fill out at his convenience, and hand in at the time of the examination. In this blank he will give information in regard to his studies and attainments. A copy of the blank may also be obtained at any time by application to the Chairman of the Committee on Fellowships.

Candidates for the Agnes Hoppin Memorial Fellowship must file their applications, accompanied by credentials and evidences of attainment, with the Chairman of the Committee on Fellowships on or before March 1.

The examination in 1900 will cover the subjects named below, and will be based on the books specially named. Other books are named for supplementary reading and reference. For additional titles, candidates are referred to the list of "Books Recommended," which is published annually in the Appendix of the *Journal of the Institute*. Each candidate should strive to make his study of the special subjects in Greek Archaeology named below as largely objective as possible, by the careful inspection and comparison of monuments of Greek art, in originals if possible, otherwise in casts, models, electrotypes, photographs, and engravings. The time at which examinations will be held in 1899 is named in each case. Details of the subjects of examination, particularly in Greek Architecture and Greek Sculpture, are subject to change from year to year.

Greek Archaeology. An outline of Mycenaean art, and the study of Greek terra-cottas, numismatics, glyptics, small bronzes, and jewels. *One and one-half hours. (Thursday, March 16, at 2 P.M.)*

Tsountas and Manatt, *The Mycenaean Age*; Collignon, *Manuel d'Archéol-*

logie grecque, translated by J. H. Wright, *Manual of Greek Archaeology*; Murray, *Handbook of Greek Archaeology*.

REFERENCE: The appropriate articles in Baumeister, *Denkmäler des klassischen Alterthums*, named under "II Kunstgeschichte," in the "Systematisches Verzeichniss" at the close of the work.

Greek Architecture, with special study of the structure of the Propylaea. *One and one-half hours.* (Thursday, March 16, 3:30 P.M.)

A. Choisy, *Histoire de l'Architecture*, II (1898); Durm, *Baukunst der Griechen*, in his *Handbuch der Architektur*, II, 1; H. v. Rohden, article *Propyläen*, in Baumeister's *Denkmäler*; W. Dörpfeld, *Mith. Ath. Inst.* X (1885), 38 ff., 131 ff.; Harrison and Verrall, *Mythology and Monuments of Ancient Athens*, pp. 344-371; F. C. Penrose, *Principles of Athenian Architecture*, 2d edition.

REFERENCE: Reber, *Geschichte der Baukunst im Altertum*; Bohn, *Die Propyläen der Akropolis zu Athen*; A. Bötticher, *Die Akropolis von Athen*, 175 ff.; C. Robert, *Der Aufgang zur Akropolis*; Lübke, *Geschichte der Architektur*.

Greek Sculpture, with special study of the still extant sculptures of the Parthenon. *One and one-half hours.* (Friday, March 17, 9 A.M.)

Gardner, *Handbook of Greek Sculpture*; Tarbell, *History of Greek Art*; Robinson, *Catalogue of Casts* (edition of 1896); Collignon, *Histoire de la Sculpture grecque*; Overbeck, *Die antiken Schriftquellen*, Nos. 618-1041 and 1137-1640; Michaelis, *Der Parthenon*.

REFERENCE: Overbeck, *Geschichte der griechischen Plastik*; Waldstein, *Essays on the Art of Phidias*; Mitchell, *History of Ancient Sculpture*; Furtwängler, *Masterpieces of Greek Sculpture*; Friederichs-Wolters, *Gipsabgüsse antiker Bildwerke*. For the sculptures of the Parthenon, A. H. Smith, *Catalogue of Sculpture, British Museum*, I, with the series of Photographs of the Parthenon sculptures published by the London Stereoscopic and Photographic Company.

Greek Vases. *One and one-half hours.* (Friday, March 17, 10:30 A.M.)

Von Rohden, *Vasenkunde*, in Baumeister's *Denkmäler*; Robinson's Introduction to the *Catalogue of Greek, Etruscan, and Roman Vases* in the Boston Museum of Fine Arts.

REFERENCE: Rayet et Collignon, *Histoire de la Céramique grecque*.

Greek Epigraphy. *Two hours.* (Friday, March 17, 2 P.M.)

Roberts, *Introduction to Greek Epigraphy*; Roehl, *Inscriptiones Graecae Antiquissimae*; Dittenberger, *Sylloge Inscriptionum Graecarum*; Larfeld, *Griechische Epigraphik*, in von Müller's *Handbuch der klassischen Altertumswissenschaft*, I; Larfeld, *Handbuch der griechischen Epigraphik*, Vol. II, *Attische Inschriften*.

SUPPLEMENTARY: Newton, *On Greek Inscriptions*, in his *Essays on Art and Archaeology*.

REFERENCE: Kirchhoff, *Geschichte des griechischen Alphabets*; Reinach, *Traité d'Épigraphie grecque*; Hicks, *Manual of Greek Historical Inscriptions*; Michel, *Recueil d'Inscriptions grecques*; Dareste, Haussoullier, et Reinach, *Recueil des Inscriptions juridiques grecques*; and the *Corpus Inscriptionum Atticarum*.

Modern Greek. One hour. (Saturday, March 18, 9 A.M.)

Gardner, *A Modern Greek Grammar*; Carl Wied, *Praktisches Lehrbuch der neugriechischen Volkssprache*; Jannaris, *Wie spricht man in Athen?* Mitsotakis, *Praktische Grammatik der neugriechischen Schrift- und Umgangssprache*; Thumb, *Handbuch der neugriechischen Volkssprache*. For the literary language: Stedman, *Modern Greek Mastery*; Constantinides, *Neo-Hellenica*.

For Lexicons, see the list in the Appendix of the *Journal of the Institute*.

The examination will test both the candidate's ability to translate the literary language into English, and his knowledge of the common words and idioms of the every-day speech of the people.

Pausanias. Interpretation of Pausanias in his treatment of Athenian Monuments and Topography. Two hours. (Saturday, March 18, 10 A.M.)

Pausanias, Book I, in the edition of Hitzig and Blümner; Translation and Commentary by J. G. Frazer; Harrison and Verrall, *Mythology and Monuments of Ancient Athens*; Lolling, *Topographie von Athen*, in von Müller's *Handbuch*, III; Milchhöfer, *Athen*, in Baumeister's *Denkmäler*; and Milchhöfer, *Schriftquellen zur Topographie von Athen*, in Curtius, *Stadtgeschichte von Athen*, pp. lxx-xciii, E-G.

REFERENCE: Curtius, *Stadtgeschichte von Athen*; Wachsmuth, *Die Stadt Athen im Alterthum*; and Jahn-Michaelis, *Pausaniae Descriptio Arcis Athenarum*.

The papers set in the fellowship examinations which were held in May, 1898, are reprinted in the Appendix to this Report, pp. 101-108.

The Agnes Hoppin Memorial Fellowship has been awarded to Miss May Louise Nichols, A.B., Smith College, 1888, who had held one of the fellowships of the School in 1897-98.

The other fellowships of the School have been awarded to Miss Harriet Ann Boyd, A.B., Smith College, 1892, who was a member of the School in the year 1896-97, and had intended to enter the fellowship examination of 1897, but went as a volunteer nurse to serve in the Greek army in Thessaly; and to Arthur Fairbanks, A.B., Dartmouth College, 1886, Ph.D., University of Freiburg, 1891, recently Instructor in Greek in Yale University.

Of the ordinary work of the School in Greece, the report of the Director gives full information.

For excavations, at the opening of the year 1897-98, the Director had in his hands a trifle more than \$2000. During the year he received the money collected for the purpose by the Archaeological Institute in 1897, \$1060; further from the Hon. John Hay \$500, and from Walter W. Law, Esq., \$250, — making in all about \$3800. From the first the Committee understood that the task of removing the soil from the site of ancient Corinth was great, and the first days of excavation in 1896 showed that the difficulty of the achievement had not been exaggerated, when it was found that more than twenty feet of accumulated earth lay over the ancient streets. That in two campaigns of excavation, the ancient theatre and the fountain Pirene, with an extensive system of water-works, should have been discovered, and the well-known ancient temple at Corinth identified as the temple of Apollo, may be considered highly satisfactory. On such an extensive field, with such a depth of earth to remove, an explorer with less learning and judgment than the Director might easily have spent a larger sum of money with less important results. Competent judges congratulate the School on the success of these excavations. The continuance of this work for at least another campaign is necessary. Pirene and the neighboring buildings should be laid entirely bare; the ancient agora, which is known to be near at hand, should be found; the precinct of the ancient temple, of which our Director has found two of the monolithic columns, lying where they fell, should be thoroughly explored. The Committee would sincerely regret any delay in accomplishing this work. Since the sites of the theatre and of Pirene have been ascertained, and are found to be in close relation to the ruins of the temple, which has been thought one of the most ancient in Greece, the probability of discovering other objects and ruins of interest is greatly increased. Further, the School now has at Corinth the track and cars which were used by the French in their excavations at Delphi; these have been rented to our

School on reasonable terms. They expedite the work of removing the soil, although as yet the cars have not been run quite to the chief point of excavation, which lies deep below the surface.

In connection with the foregoing, the following extract from the report of Professor Emerson to the Committee will be of interest. During the Easter vacation he visited the site of the discovery of the Apollo of Tenea, and wrote as follows :

"Renewed excavations on and near the spot were found to be a matter of no difficulty whatever, and of some promise. The same is true of the sites of the Isthmian Sanctuary and of Lechaëum. A search for buried antique remains on Acrocorinth will be even more feasible; the ground is already state property and no expropriation or other form of purchase is necessary. It will be remembered that a practical monopoly of excavation has been conceded to the American School for the whole eparchy of Corinthia, on the sole condition that its exploration of this section of Greece, of which the political, commercial, and military importance and the place in the development of Greek art were so significant, both in prehistoric and in historic periods, shall be effectual and continuous."

Professor Emerson, as Professor of Archaeology, gave a series of weekly lectures on the temples of Athena on the Acropolis and the sculptural decoration of the Parthenon. He abandoned his plan of offering another course of exercises in epigraphy, observing that the majority of the students of the School already had as many exercises as they could attend with profit, in the lectures by Professor Richardson, Dr. Wolters, and himself, on Athenian Sculptures, by Professor Dörpfeld on Athenian Topography, by Dr. Reichel and Dr. Wilhelm of the Austrian Institute on Mycenaean Antiquities and Greek Inscriptions, and by Dr. Hoppin on Greek Vases, taken in addition to their equally regular and at times almost as frequent attendance of the open meetings of the different foreign schools and of some native societies.

Dr. Cooley, at the suggestion of Professor Emerson, made "a very scrupulous and instructive examination of the traces of sculptural decoration in the two pediments of the so-called Theseum; the results of this examination have been embodied in careful drawings, accompanied by an explanatory paper."

Interest was stimulated by Professor Emerson further "in subjects which do not lie directly within the scope of classical studies, as commonly understood, — the relatively unfamiliar field of the mediaeval and modern history, language, and ecclesiastical art of Greece. Professor Carroll acquired a sufficient command of Modern Greek to enable him to become a valued contributor to an Athenian magazine which is devoted to the discussion of national questions. Mr. Brown successfully busied himself with the Albanian dialect spoken by the peasant population of Attica and of Corinthia (where the great majority of our workmen are Albanians, and speak that language), and also with the vernacular Greek as spoken by the classes which are least affected by new literary ideals."

On the occasion of a School excursion to Eleusis, Professor Emerson "gave an explanatory lecture on the recently cleaned and restored eleventh-century mosaics of the monastery of Daphni, and on another excursion made some independent notes, sketches, and measurements of the equally old, and originally even more splendidly adorned principal church of the monastery of Hosios Lukas, near Delphi, which has recently attracted the attention of able French and British Byzantinists." He suggests that "it would not be amiss for those of our American schools of art and universities where due attention is given to the history of architecture and painting in the Middle Ages, to unite in placing some such sum as \$250 each year, or \$500 every alternate year, at the disposal of a qualified member of the School for the conduct of a piece of reproductive exploration in this field, which hitherto has been entirely neglected by American and indeed by European scholars."

In November, 1897, Professor Emerson "conducted to Delphi and through a considerable part of Peloponnesus a party of five students of the School who desired to become acquainted with other sections of the country than Attica, and with the results of the important excavations made at Delphi, Olympia, Lycosura, Megalopolis, Messene, Sparta, and other places, by the German, French, British, and American Schools, and by the

Greek Archaeological Society." They were absent from Athens nearly four weeks.

In February a second considerable trip in the interior was undertaken in Boeotia, under the guidance of Professor Emerson. The party was absent for eleven days.

A day of travel by railroad, on horseback, and on foot was profitably spent by Professor Emerson and Mr. Brown in following the course of the Franco-Byzantine aqueduct which at one time conducted the water of Lake Stymphalus to Corinth; but they were not able to determine its virtual identity with an antique predecessor.

Professor Emerson closes his report to the Managing Committee as follows:

"A word in conclusion on a matter regarding which there has been and still is much misconception in America and Western Europe. Greece is still a wild country in the sense that the simplicity of its ancestral traditions and some of the shortcomings of Oriental civilization have not yet been obliterated by the rapid spread of Frankish customs and institutions. Women and delicately nurtured men may well recoil from the annoyances and hardships incident to travelling much in the interior, and indeed by the coastwise steamboats. But the waning custom of carrying arms is a merely ornamental survival, there being perhaps no country through which a ten-year old child might travel more safely from end to end on foot. Boys and girls of this age, and women of all ages, are often encountered tending goats and sheep on lonely hilltops, all over Peloponnesus. Thessaly has indeed been an exception to the general rule of perfect security this year. In no other part of the country has the shortlived episode of the Thessalian War left obvious traces. The pressure of 25,000 Thessalian refugees in Athens who are dependent in the main on public charity, is scarcely brought nearer to the foreign resident than it may be by the discovery that his favorite opera, or maybe an assembly ball, is given for a charitable purpose. Few ploughs were stopped by the short absence in the field of 62,000 Greek soldiers; and the services of customs and internal revenue report monthly receipts, and an annual total for 1897, so largely in excess of 1896 and previous years as to have more than made up the shortages occasioned by the foreign occupation of Thessaly, the largest and richest of all Greek provinces so far incorporated in the Kingdom. Nor has the defeat of the Greek arms brought any increase of taxes, or any other financial symptom more distressing than a fall of the antebellum premium on gold from 67 to 50 and less this year."

The difficult and intricate problems connected with the publication of the results of the important excavations conducted

on the site of the Argive Heraeum during the years 1892-95, have been carefully considered. In August of the present year, Professor Waldstein, who had conducted the excavations, held a conference with several of his collaborators in Cambridge, England, which was attended also by the Chairman of the Managing Committee, who was acquainted with the Committee's judgment of what was wise and practicable. The material for the publication which was presented at the Conference made manifest the value and interest of the work. The Committee hopes that this will be printed before the close of 1900.

The Committee deeply regrets that the efforts to complete the endowment fund in accordance with the plans detailed in the Sixteenth Report have met with little success. The Committee is unable to plan in detail for the future of the School, while the greater part of its income is in any degree uncertain.

No one of the "supporting colleges and universities" has yet funded its subscription by the payment of \$5555, in accordance with the resolution which was adopted by the Committee two years ago. Several attempts have been made, however, which are likely to prove successful. One of the Committee is seeking some one who will endow the School to the amount named in memory of a friend, and this suggestion may be useful to some others. The times have been unpropitious, and during the past autumn and winter we have felt bound to leave a fairly free field for our sister School, the School of Classical Studies in Rome, whose very existence seemed at stake.

We must not ignore, however, the fact (which may seem sufficiently obvious) that our School has but a very narrow margin of income over its necessary expenses, and that we have been practising from the first a rigid economy. Possibly a little less economy would have added to our dignity; but with a full appreciation of the self-denial which was practised by many a Greek department in a college at home for the sake of the School in Greece,—aware of the difficulties which many members of the Committee had met, in collecting the \$250 for

the annual contribution, and of the ease with which that money could have been employed for books, casts, photographs and other apparatus for use at home,—the Committee of the School has reduced its expenses to the very lowest limit which was compatible with true and wise economy.

Again, the attention of the friends of the School and all interested in archaeological studies, is called to the importance of securing at once the sum of \$2500 or \$3000 for the continuance of the excavations at Corinth in the spring of 1899. To omit our work there for even a single season would be to neglect an important opportunity.

In August of the present year, 1898, the Chairman of the Managing Committee had the privilege of spending nearly a fortnight in Athens, and he takes pleasure in reporting that he found abundant evidence, even at this season, of the prosperity and honorable work of the School. Besides the Director, two present and one former member of the School were at work in its library. Professor Fossum, of St. Olaf College, a student of the School in 1890-91, had gone to Greece this summer in order to verify some surmises of his own with regard to the theatres at Sicyon and Eretria, and made some interesting discoveries. Mr. De Cou was still busy in his patient and scholarly study of the bronzes from the Heraeum. Mr. Baur was investigating the myths which have to do with Greek divinities of healing. The principal objects of interest from the Argive Heraeum, except the bronzes, are now exhibited in the Central Museum at Athens. The Chairman found great satisfaction also in visiting, under the kindly and instructive guidance of the Director, the sites of the School's excavations at the Heraeum and at Corinth. He wishes that all friends of the School might have shared his experiences.

THOMAS DAY SEYMOUR, *Chairman.*

YALE UNIVERSITY,
October 1, 1898.

REPORT OF THE DIRECTOR

1897-98

To the Managing Committee of the American School of Classical Studies at Athens:

GENTLEMEN, — I have the honor to submit the following report on the affairs of the School during the year 1897-98.

I left Greece at the close of the term of residence required of the Director, at the beginning of June, 1897, and spent the summer in Switzerland. This was my first absence from Greece since entering on my office in 1893. But for my anxiety for my family in the troubled condition of the country, I should probably have remained this summer also in Greece. The change of climate, however, after four continuous years of residence here was very welcome.

On my way to Switzerland I made a tour of Sicily with Mr. Chase and Dr. Hoppin, touching all the places where Greek remains are found, and studying with especial care Syracuse, Girgenti, and Selinunte. From Sicily we crossed to Naples, and spent a considerable time in the museum there and at Pompeii.

I returned to Greece through Italy with stops in Florence, Rome, and Naples. In Rome I visited the Roman School, and was kindly received by Professor Smith and Professor Norton, and was guided by them through the Forum. In Naples I met Dr. and Mrs. Carroll, and continued with them all the way to Athens, traversing with them archaeological ground at Pompeii, Paestum, Metapontum, and Tarentum, with two hours at Coreyra.

On the evening of my arrival in Athens, October 3, I put myself in communication with the new members of the School

who had already arrived, Messrs. Cooley and Dickerman, and Miss Nichols. On Tuesday, October 12, I took the members of the School to Nauplia by sea, spending five days on a tour which included the Argive Heraeum, Tiryns, Argos, Mycenae, and Epidaurus. I supplemented this tour with two lectures in the Museum at Athens on the objects found at Mycenae. These lectures were the beginning of my series of weekly lectures in the Museum.

Of these weekly exercises I need not speak in detail, since my practice has deviated little from that of former years. I did not cover so much ground as sometimes I have done, but confined myself mainly to archaic art, in which the Museums of Athens are so rich that one can study it to advantage only here. Each student was called upon to discuss some work of sculpture, after careful preparation, but the majority of the exercises consisted of lectures.

Since several members of the School were attending Dr. Wolters's lectures on sculpture, as well as those of Dr. Richards, Assistant Director of the British School, on the same subject, it seemed less imperative than usual that I should continue my exercises after March 1, when the preparations for excavations began to make demands upon my attention.

I have travelled comparatively little with the School this year, with the exception of traversing Attica with bicycling parties. Professor Emerson has kindly undertaken the supervision of the long tours, one through Peloponnesus and one through Boeotia and adjacent regions. But besides the tour in the Argolid, I took the whole School with others, amounting in all to twenty-three persons, to Eleusis for an exposition of the ruins there. Ten of us also made the ascent of Parnes. With a few members of the School I have visited Marathon and Sunium, climbed Kiona, the highest mountain in Greece, as well as Geraneia, which for its height is a most rewarding climb; and made a tour in Aetolia, visiting, besides other points of interest there, the newly excavated Thermon, the ancient and honorable capital of the Aetolian League.

We have held three public meetings during the year, at which the following subjects were presented :

- Jan. 14. Professor Emerson : Hermes with the Ram.
Mr. Brown : Newly Discovered Inscriptions from the Wall of the Acropolis.
- Feb. 4. The Director : A Trace of Egypt at Eleusis.
Mr. Chase : An Argive Type of Terra-cottas.
Dr. Carroll : On Illustrations drawn from Painting and Sculpture in Antique Literary Criticism.
- Mar. 25. Mr. Brown : A Newly Discovered Fragment of an Athenian Treasure List.
Mr. De Cou : An Argive Bronze Figurine.
Miss Nichols : On the Origin of Red Figured Technique.

Professor Emerson also read an account of his visit to Delphi and Boeotia before a smaller public on another occasion.

It is the individual progress and gains of each student that justify the existence of the School, and in no year since I have been connected with it has the library been more used by diligent workers on subjects on which they had a special interest. Mr. Brown's discovery of a number of inscriptions which had been hitherto overlooked in the wall of the Acropolis was nearly as venturesome as the work of Mr. Andrews two years ago, and that of Professor Ebersole a year ago, on the Parthenon. The three cases following one another in successive years have created a reputation for our men as seekers of hazardous enterprises. Mr. Brown's presentation of the results of his researches is also worthy of great praise, showing that acquaintance with the Athenian treasure lists, for example, which can come only from close and continuous study. Mr. Chase, the other Fellow of the School, spent the summer in Italy studying in the museums there the ancient terra-cotta figurines with special reference to his preparation for publication of the terra-cottas from the Heraeum, a work to which most of his time during the present year has been devoted. His paper presented at a public meeting gave some of the results of his researches. Mr. Baur has been working on the subject of Divinities of Healing. Dr. Cooley has collected

with care all the passages in ancient authors relating to the temple of Athena which stood on the Acropolis before the Persian Wars. Mr. Dickerman, taking as a starting-point a bronze figure discovered last year in our brief excavations at Corinth, has been investigating the subject of Pegasus or the Winged Horse. Mr. De Cou, who contrary to his expectations has remained in Athens through the year, his fourth year of residence at the School, has devoted his time to the bronzes from the Argive Heraeum, and presented some of the results at an open meeting. Mr. Lythgoe, who came back to the School after completing a year's work here four years ago, has devoted his time mainly to Egyptology, expecting to be next year a member in the field of the Egyptian Exploration Society, in association with Professor Flinders Petrie. Miss Nichols, also a Fellow of the School, has been studying Nike in Greek Art. Her paper for the open meeting of March 25, on *The Origin of the Red Figured Technique*, had merit. Dr. Baden gave some attention to Attic Grave Reliefs. Dr. Bates did not study any particular subject, as his intention was to get a general view of the art treasures of Greece and a vivid impression of the country, which he certainly must have carried away with him, for he travelled far and wide.

Longer terms of residence are becoming a striking feature of the School life. The Fellows with a single exception have remained each at least two years. Former members also return after an interval. Mr. De Cou and Mr. Lythgoe are examples of this. Thus we are collecting a body of maturer men, a real constituency, who are able to achieve results of value. Of course some men come to the School already trained in archaeological study; but it is difficult for the average college man even when he is drawn to Greece by strong interest in its literature, history, and art, to produce at once an essay fit for publication as a contribution to knowledge. He himself feels it to be like demanding "figs of thistles."

Professor Fossum, a member of the School in 1890-91, has spent this summer in Greece studying the remains of ancient theatres in order to supplement his previous work in the theatre at Eretria. At his own expense he has made slight supplementary excavations both in the theatre at Eretria and in that at Sicyon. In the latter he has made some interesting discoveries, which he will soon publish. As the excavation in these theatres was the work of our School, Mr. Kabbadias kindly allowed Professor Fossum to make his investigations without an inspector.

Of the members in attendance during the past year, Mr. Baden and Mr. Baur arrived late in October, and Mr. Bates not until December 20. Mr. Baur and Mr. De Cou are still present (August 13). The others sailed from Greece in July, except Dr. Carroll, who left on March 4 to spend two months in Sicily and at Rome, and Mr. Lythgoe, who left March 25 to study Egyptology at Bonn. Dr. Cooley, Mr. Dickerman, and Miss Nichols, who at present are studying and travelling in Italy, and Mr. Baden and Mr. Baur, will be in Athens next year. Since Miss Boyd, who was here in 1896-97, returns as a Fellow, we shall have a large number of second-year members.

Besides those who were regularly enrolled as members of the School several others have attended many of its exercises. Mrs. Stone and Miss Florence A. Stone of Boston have attended practically all. Professor Demarchus C. Brown of Butler University, who was in attendance during a part of the year 1892-93, was here through the month of October and took the Argive trip with us. Mr. A. Everett Peterson of South Manchester, Conn., was with us several months, and Professor Hackett of Bowdoin College for more than a month.

In the spring we were visited by the members of the Roman School, who made the tour of Peloponnesus under the guidance of Professor Richard Norton. Since I was engaged in excavations at the time, it was impossible for me to render them

special services; but fortunately Professor Norton's long residence in Greece as a member of our School made this unnecessary. They enjoyed the hospitality of the School and made use of its library.

I had the pleasure of visiting Eleusis, Marathon, the whole Argive region, and Olympia with Walter W. Law, Esq., of New York, a hearty and genial friend of the School. Professor Emens of Syracuse University, a member of your Committee, was also with us in the intervals between Dr. Dörpfeld's tours.

I enjoyed particularly the presence during the month of October of Professor Tarbell of the University of Chicago, a former Director of the School and a member of your Committee, on his way to Egypt.

I have been ably assisted this year by my colleague, Professor Emerson, whose companionship has been most agreeable. It is a satisfaction to know that he is to continue his service as Professor of the School another year. Dr. Hoppin, having been appointed Lecturer on Vases, began a course which was stimulating and highly appreciated by the members of the School. But after three exercises, one at the School and two in the Museum, he was called to England by the illness of his sister, and regret at his unfinished course found frequent expression. When he at last returned to Greece in the spring, the lecture season was over. He will be greatly missed as he now ends his five years of connection with the School. He can look back with peculiar satisfaction on his work on the vases from the Argive Heraeum.

The usual courtesies of the other Schools have been extended to us this year. Dr. Dörpfeld, as ever, has been helpful and stimulating. Our students have as a matter of course attended his *giri* in Athens; and Mr. Baden, Dr. Bates, and Mr. Baur shared his journeys through Peloponnesus and among the Islands, as well as a special trip to Troy. Dr. Hoppin and Mr. Chase also took part in the latter excursion. Miss Nichols and Dr. Cooley enjoyed a part of the Peloponnesus tour. The

public meetings of the German School have given us much instruction and suggestion.

Mr. Hogarth, the new Director of the British School, gave us two suggestive addresses, one at a formal meeting and another at a meeting of the British students to which we were informally invited. The same pleasant and cordial relations continue between the British and American Schools as under former directors.

Dr. Reichel and Dr. Wilhelm, the Athenian Secretaries of the newly founded Austrian Institute, have helped many of us in Museum exercises and in private talks. This new star in the constellation of archaeological schools shines with no uncertain light.

We have regretted keenly the illness of M. Homolle, the Director of the French School, which prevented his return to Greece until April, and kept the French School practically closed for the year, by which an important factor in our life was removed. The celebration of the semi-centennial anniversary of the founding of that School, which took place this spring after postponement from the autumn of 1897 on account of the war between Greece and Turkey, allowed the representatives of its associates of other nations an opportunity to express their respect and admiration for this noble institution and its contributions to archaeological knowledge.

The Hon. W. W. Rockhill, our new Minister to Greece, has been a faithful friend to the School, and has shown interest in all our work.

My complete financial report will be rendered to the Treasurer at the end of the financial year. The ordinary expense account of the School will be larger than in any recent year on account of the fall in gold from forty-four or forty-five drachmas to the English sovereign in 1897 to thirty-five or thirty-six in 1898, without any corresponding reduction in the prices of labor or commodities. It is rather surprising to see a nation come out of a disastrous war with all lost save its finances, which are in a blooming condition compared with previous years.

The following is a list of the gifts to the library during the year 1897-98:

From the University of Upsala:

Seven dissertations on philological subjects.

From the Trustees of the British Museum:

Catalogue of the Greek Coins of Lycia, Pamphylia, and Pisidia.

From the British School at Athens:

The Annual of the British School at Athens, 1895-96.

From the German Archaeological Institute:

Ópramoas: Inschriften vom Heroön zu Rhodiapolis. By R. Heberdey.

From the Greek Archaeological Society:

Πρακτικά for 1892-94.

From the School of Dimitisana, through Mr. B. Leonardos:

Ἡ Δημησιάνα. By T. Kandeloros.

From The Hon. W. W. Rockhill:

Several Reports of the Smithsonian Institute, Bureau of Ethnology, and Commissioner of Education; and books on the late war between Greece and Turkey.

From Professor B. I. Wheeler:

The Five Post-Kleisthenian Tribes. By F. O. Bates.

From Mr. A. M. Lythgoe:

Führer durch die Antiken in Florenz. By W. Amelung.

From Miss Daphne Kalopothakes:

Catalogue des Vases de Terre Cuite.

From the authors:

Barrows, S. J., *The Isles and Shrines of Greece.*

Bethe, E., *Das Griechische Theater von Dörpfeld und Reisch.*

Bikelas, D., Translations into Greek of five plays of Shakespeare.

Dawes, Elizabeth A. S., *The Pronunciation of the Greek Aspirates.*

Emery, Annie E., *The Historical Present in Early Latin.*

Gennadius, J., *Archaeological Excavations in Greece.*

Hamdy Bei, *Musée Impérial Ottoman, Monuments Funéraire.*

Hogarth, D. G., *Devia Cypria and Philip and Alexander of Macedon.*

Mahaffy, J. P., *On the Flinders Petrie Papyri.* 2 vols.

Mistriotis, *Ἑλληνικὴ Γραμματολογία.*

Skias, A., *Ἀρχαῖοι Τάφοι ἐν Θερμοπύλαις.*

Stählin, F., *Geschichte der Kleinasiatischen Galater.*

Stone, W. F., Jr., *Questions on the Philosophy of Art.*

Svoronos, J. N., *Report of Transactions of the National Numismatic Museum for 1894-95.*

Ware, W. R., *The Study of Architectural Drawing in the School of Architecture* (Columbia University).

Warren, Winifred, *Conjunctural Temporal Clauses in Thucydides.*

Whittaker, J. T., *Exiled for Lèse Majesté.*

Wilhelm, A., *Bericht über Epigraphische Studien in Griechenland.*

Ziebarth, E., *Neue Hypothenekeninschriften.*

Besides these gifts we have received \$100 from Dr. J. C. Hoppin, a part of which will go to the payment for Serradifalco's *Antichità della Sicilia*, which has been already ordered.

The principal additions to the library by purchase are as follows:

The Encyclopaedia Britannica.

Johnson's Universal Cyclopaedia.

Dittenberger, *Corpus Inscriptionum Graeciae Septentrionalis*, III, 1.

Mommson, *Corpus Inscriptionum Latinarum*, III, 1.

Robert, *Die antiken Sarkophag-Reliefs*, III, B.

Schreiber, *Die antiken Bildwerke der Villa Ludovisi zu Rom.*

Benndorf und Schöne, *Die antiken Bildwerke des Lateranischen Museums.*

Matz und Von Duhn, *Antike Bildwerke in Rom.*

Dütschke, *Bildwerke in Ober-Italien.*

Frazer, *Pausanias' Description of Greece.*

Phillipson, *Thessalien und Epirus.*

Tsountas and Manatt, *The Mycenaean Age.*

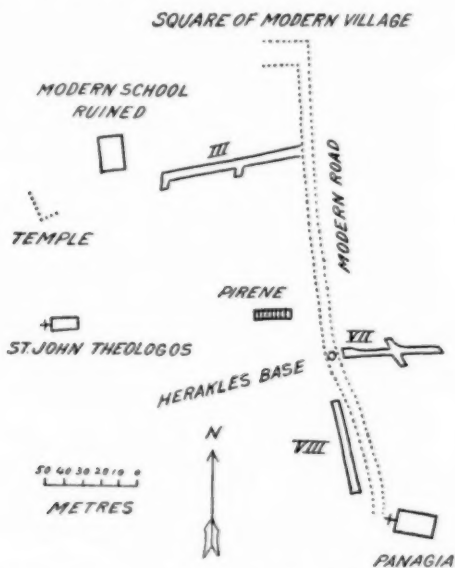
Furtwängler, *Beschreibung der geschnittenen Steine im Antiquarium zu Berlin.*

Benndorf, *Die Metopen von Selinunt.*

Klein, *Praxiteles.*

The excavations at Corinth were resumed on March 23 of this year, and pushed to a successful termination in the uncovering of Pirene, the famous fountain which was the centre of the life of the ancient city. This work closed on June 13. Professor Emerson assisted about half of the time, and has undertaken the publication of the inscriptions. Mr. Brown and Mr. Dickerman were present from the beginning to the end. Dr. Cooley was present the greater part of the time, photographing and making the plans. He also spent three weeks of very hot weather in Corinth, after the departure of the others, in the effort to complete his plan of the excavation terrain, but was compelled to stop short of absolute completion by a fever

which made it imprudent for him to return thither. Mr. Chase was with us one week. All the other members of the School visited us. I was most heartily and efficiently supported in the arduous undertaking; but I think it only just to express especial acknowledgment of Mr. Brown's services. Even the master-mason and master-plumber were prevented by his judgment from making blunders.



EXCAVATIONS AT CORINTH IN 1898: SKETCH PLAN.

We worked with a force of about a hundred and twenty men, sometimes with more, but at the end with fewer. We had a track and twelve cars, borrowed from the French School through the great courtesy of M. Homolle, for carrying the earth to a distance. We began in the valley east of the temple on the south side of Trench III of 1896 (see sketch plan), and moved up the valley, clearing at the same time the side-hill up to the very edge of the temple. By digging in the road along

the southern side of the temple, we found two fallen columns practically intact, but battered. The ground on which the temple stands will be expropriated and placed at our disposal before another season for excavations begins. This excavation will be an easy matter, as the earth is there nowhere over five feet deep. But in the valley, where we did most of our work this year, we dealt with from fifteen to twenty feet of earth.

I need not here give the details of our results. I have already sent a summary of them to the *Journal of the Institute*¹; and for a more detailed account I must wait for the completion of Dr. Cooley's plan. Pirene is our main result—the ample justification of all our labor and expense. An account of this I must reserve for a separate article. Several papers will soon be prepared on various subjects connected with our work, by various members of the School. The yield of sculpture is somewhat disappointing. Five statues have been found, which are good, but unfortunately headless. Possibly further excavation may complete one or more of these, as well as show the connection of the many fragments which have been already found.

While Pirene is immensely interesting as an example of an ancient well-house, which so often appears on vases, it is even more important topographically. From the description of Pausanias (II, 3, 1-3) it is now clear that the agora is only a little way up the incline toward Acro-Corinth, where our valley reaches level ground. In a trial trench dug west of Trench VIII, 1896, we found admirable Greek walls, which are probably a part of the agora. I have designated enough ground in this quarter for expropriation to allow us to secure certainty on this point. The temple which we propose to excavate, as we now see from the same description of Pausanias (II, 3, 6), is the Temple of Apollo, the first object on the left of the road from the agora to Sicyon.

Nearly \$3000 have been expended this season, exclusive of payment for the land on which we have excavated this year

¹ See above, pp. 233-236.

and also for that which has been further designated for expropriation, which, although the government is not yet ready to receive it, will amount to a maximum of another thousand dollars. I hold money enough for this payment, but for future work we have no funds. We are greatly indebted to Colonel John Hay for helping us through this year with a second gift of \$500.

This seems to be an era of the excavation of cities. The Austrians have Ephesus, the Germans have Miletus, and we are fortunate in having secured Corinth. The work at Ephesus has been going on while we have been working at Corinth; and the Germans, having shown at Priene what a Greek city was like, will undertake the greater excavation at Miletus. "The blood more stirs to rouse a lion than to start a hare." Germany is excited over its great enterprise. Ours is one equally adapted to stir the blood; for we have "roused a lion." When the king of Greece visited us, and inspected Pirene and its surroundings, he repeatedly said, "You must finish all this." He seemed to have misgivings. I should be sorry to think that our friends in America would allow us to stop here. Will they be less generous than the German Kaiser?

The following is a summary of receipts and disbursements for excavations this year:

	Drachmas
Held at the close of the excavations of May, 1897, a balance in	
frances which shrunk, by the fall in gold, from 3,695.10 to	3,037.80
Colonel John Hay Fund (2,535 francs + interest) 2,636.40 francs	3,822.30
Arch. Inst. of America (5,490 francs + interest) 5,527.50 francs	7,933.40
Received in 1898:	
From Benjamin T. Frothingham, 130 francs	184.60
" Arch. Inst. of America, 5,538.50 francs	8,168.55
" S. O. Dickerman	100.00
" A. S. Cooley	75.00
" Balance in an account with Professor Martin	2.45
" Photographs for personal use	9.00
	23,333.10
Deduct the expenses of excavation, including the transportation	
of track from Delphi to Corinth (1,225.20) and the purchase	
of land (475.00)	22,287.40
Balance in drachmas	1,045.70

Other funds, not converted into Greek drachmas :		Francs
Received from Benjamin T. Frothingham	500.00	
“ “ W. W. Law (through the Arch. Inst.)	1,303.15	1,803.15
From which deduct payment for rent of track and cars		213.10
Balance in French francs		1,590.05
Received from Colonel John Hay		£100
Balance in English pounds		£100

Thus I hold £100, 1,590.05 francs, and 1,045.70 drachmas, amounting in all to about \$950, which will just about pay for the expropriation of land already made and for that about to be made by the government.

In closing my first term of five years as Director of the School, I thank the Committee for the opportunity which it has given me for observation and study; and more particularly, for the confidence and approval shown by my reelection to a second term of service. Appreciating the important trust, I shall try to discharge it with fidelity.

RUFUS B. RICHARDSON.

ATHENS, August 13, 1898.

American School
of Classical Studies
in Rome

THIRD ANNUAL REPORT OF THE MANAGING
COMMITTEE OF THE AMERICAN SCHOOL OF
CLASSICAL STUDIES IN ROME

To the Council of the Archaeological Institute of America :

GENTLEMEN,—I have the honor to submit to you the Report of the Managing Committee of the American School of Classical Studies in Rome, from September 1, 1897, to September 1, 1898, together with the Report of the Director of the School for the year 1897-98, Professor Clement L. Smith, of Harvard University. The latter Report includes that of the Professor of Archaeology in the School, Mr. Richard Norton. The Report of the Director will be read with interest, both as indicating the variety and richness of the opportunities opened by the School to the young men of our country, and as narrating the happy solution of the question whether the governmental authorities of the Italian Kingdom and of the Vatican would grant to women students of the School the same privileges which have been accorded to the men.

It remains for the Chairman of the Managing Committee to report upon a less interesting but far from unimportant part of the activity of the School, namely, the efforts which have been made, in the year just closed, to raise the means for carrying on its work in its fourth year, and the plans which have been devised for its continuance thereafter.

As has been stated in previous Reports of the Committee, the money which was collected at the beginning of our movement was solicited for immediate expenditure in the first three years.

The Managing Committee realized that, under the financial conditions existing in this country at the time, no attempt to secure a permanent endowment could possibly be successful. In spite of the failure of some of the subscriptions, the money then raised proved to be sufficient for the purpose; and, indeed, a gratifying amount was left over.

The Committee had hoped that, when the School had fairly entered upon its career, the recognition of the great value of the work which it had to do,—in a city which is not only the most important in the world's secular history but is also familiar to a great number of Americans,—would lead some person, or group of persons, to provide it with a permanent endowment. Such, doubtless, will still be the ultimate fortune of the School; but, up to the present time, while great interest has been taken in it by many people, and while many have shown themselves ready to give to its support, the benefactor, or benefactors, who shall establish it in perpetuity have not yet been found. We have, accordingly, had to face again the problem of support for the immediate future. By the energetic labors of members of the Committee, in several parts of the country, a sum of money had been collected, before the regular meeting on May 12, 1898, which, while less than the indispensable minimum, so nearly approached this as to justify the Committee in providing for the fourth year of instruction. We confidently believe that the residue will be obtained.

The most serious question to come before the Committee at its meeting was with regard to the sources from which help should be sought in the future. When the School was established, there was some fear lest a direct appeal to the colleges for assistance might diminish the revenues of the School at Athens, which are derived principally from subscriptions given directly by "contributing colleges," or given by friends of colleges on their behalf. Accordingly, subscriptions were not asked with a view to the representation of colleges. The Committee has felt, however, that there existed, in the natural interest of the colleges in such a School, the surest source of

income, independent of large gifts, that could be found. At the meeting in May last, it was the opinion of all who were present that this source must now be drawn upon, with the careful reservation that the School in Rome should not receive help from any college at the expense of the School at Athens. This position found favor on the following day at the meeting of the Managing Committee of the School at Athens, and action in accordance with it is now in progress.

The Treasurer of the Committee, Mr. C. C. Cuyler, who had personally visited the School in the course of the previous year, brought much cheer and satisfaction to the Committee by his account of the impression which the School had made upon him, and his conviction that college graduates might readily be brought to understand its importance and give it their willing assistance. He himself took the first step toward this solution of our problem by volunteering to raise a sum of money among Princeton alumni, as their contribution toward the support of the School. The movement has since that time been taken up, at Mr. Cuyler's prompting, by alumni of other institutions: Mr. Thomas Thacher has taken in charge a subscription among Yale alumni, Mr. Lawrence E. Sexton among Harvard alumni, Mr. Arthur L. Lincoln among Brown alumni, Mr. C. F. Mathewson among Dartmouth alumni, Mr. William B. Boulton among University of Pennsylvania alumni, Mr. Henry W. Sackett among Cornell alumni, and Mr. Clark Williams among Williams College alumni. The agreement reached in the two Committees with regard to an official appeal to the Colleges as such, and the movement inaugurated by Mr. Cuyler among college alumni, undoubtedly constitute the most important incidents in the history of the School in Rome during the year.

In view of the closer association which is expected to be brought about between the colleges of the country and the School in Rome, it was voted at the same meeting upon the 12th of May "That all graduates of colleges represented by contributions shall receive at the School instruction free of charge; that other graduates shall pay \$25 as an annual

fee; and that this motion shall go into operation in the year 1899-1900."

It was announced that the Director, acting under the advice of the Executive Committee, had secured the lease of the Villa Cheremeteff for another year.

The question was raised whether the School might not be of service to teachers and students of the classics, of history, and of art, who could not be absent from their duties in this country during the winter months, by providing a summer course of lectures in Rome, Naples, and Pompeii, on a plan similar to that by which lectures are provided during the winter vacation for teachers in the German and Austrian Gymnasien. It was suggested that the work in Rome, for example, should consist in orientation in museums, in lectures on Roman topography, architectural remains, and typical early churches, and in excursions to Tivoli, Ostia, the Alban Hills, and at least one Etruscan site. Interest in the plan was very generally expressed, and a Committee, consisting of Professor Kelsey, of the University of Michigan, Professor Frothingham, of Princeton University, and Professor Merrill, of Wesleyan University, was appointed to give it consideration. Since the date of the meeting, the Committee upon the suggested course has made a partial draft of a plan, and correspondence upon the subject has been conducted between this Committee, the Executive Committee, and the officers of the School now resident in Rome. The conclusion reached was that, at any rate until the School had a permanent Director, the difficulties in the way were too great; and the further consideration of this promising plan is accordingly postponed for the present.

The Directorship of the School for the year 1898-99 had already been accepted before the meeting by Professor Tracy Peck, of Yale University, who had been elected in 1897. Professor Richard Norton, after a very successful term of service as Professor of Archaeology in the School, was re-elected for the coming year. In addition, Professor Elmer T. Merrill, of Wesleyan University, was elected to be Professor

of the Latin Language and Literature for the same year. The School thus has a larger force of instructors in 1898-99 than it has had in the past.

Professor Andrew F. West, of Princeton University, Professor Alfred Gudeman, of the University of Pennsylvania, and Professor Charles G. Herbermann, of the College of the City of New York, were elected to membership in the Managing Committee. The Honorable Wayne MacVeagh, elected while residing in Rome as Ambassador of the United States to the Court of Italy, resigned his membership. The resignation was accepted, and it was voted that the Ambassador of the United States to the Court of Italy should henceforth — subject to the acceptance of the incumbent of the office — be a member of the Committee *ex officio*.

The Committee on Fellowships, consisting of Professor Warren, of the Johns Hopkins University, Chairman, Professor Marquand, of Princeton University, and Professor Merrill, of Wesleyan University, presented the following report:

Examinations were held on Tuesday, Wednesday, and Thursday, May 17, 18, and 19, at Rome, Italy, Madison, Wis., Evanston, Ill., Ann Arbor, Mich., and New Haven, Conn. The papers set at the examinations were prepared by Professors Egbert, Marquand, E. T. Merrill, T. Peck, K. F. Smith, and Warren. Six candidates requested permission to take the examinations, but one subsequently withdrew. The Committee awarded fellowships to three candidates,—the two Fellowships in Classical Archaeology to Charles Upson Clark, A.B., of Yale University (1897), and graduate student at Yale in 1897-98, and to Grant Showermann, A.B., of the University of Wisconsin, 1896, A.M., 1897, and Fellow in Latin of the University of Wisconsin, 1896-98; the Fellowship in Christian Archaeology to William Warner Bishop, A.B., of the University of Michigan, 1892, A.M., 1893, Professor of Greek at Missouri Wesleyan College, Cameron, Mo., 1893-94, and Instructor in Greek at the Garrett Biblical Institute, Evanston, Ill., 1895-98.

The Committee on Fellowships makes the following announcement with reference to the competitive examinations for fellowships.

The Managing Committee of the American School of Classical Studies in Rome expects to award three fellowships yearly, as follows:

A fellowship of \$600, offered by the Archaeological Institute of America.

A fellowship of \$600, offered by the Managing Committee.

A fellowship of \$500, for the study of Christian Archaeology, offered by friends of the School.

Like the other privileges of the School, these fellowships are open to women as well as to men.

The holders of these fellowships will be enrolled as regular members of the School, and will be required to pursue their studies, under the supervision of the Director of the School, for the full school year of ten months, beginning on the 15th of October. They will reside ordinarily in Rome; but a portion of the year may be spent, with the consent and under the advice of the Director, in investigations elsewhere in Italy, or in travel and study in Greece under the supervision of the Director of the American School of Classical Studies at Athens. In addition to his general studies, each holder of a fellowship is required to take some definite subject for special research, and to present to the Managing Committee a thesis embodying the results of his investigation. For the prosecution of such special investigation he may obtain leave, under certain conditions, to supplement his studies in Rome by researches elsewhere than in Italy or Greece. Twice in the year — namely, on the first of February and the first of June — each fellow will send a report to the Chairman of the Committee on Fellowships concerning the use he has made of his time.

These fellowships are open to all Bachelors of Arts of universities and colleges in the United States of America, and to other American students of similar attainments. They will be awarded chiefly on the basis of competitive written examinations, but other evidence of ability and attainments on the part of candidates will be taken into consideration.

Each candidate must announce in writing his intention to offer himself for examination. This announcement must be made to the Chairman of the Committee on Fellowships, and must be in his hands not later than February 1. The receipt of the application will be acknowledged, and the candidate will therewith receive a blank, to be filled out at his convenience, and handed in at the time of the examination, in which he will give information in regard to his studies and attainments. A copy of this blank may also be obtained at any time by application to the Chairman of the Committee on Fellowships.

The examinations will be held on Tuesday, Wednesday, and Thursday of the third week in March, at the American School in Rome, at the American School at Athens, at any of the Universities and Colleges in America represented on the Managing Committee of either School, and at such other places as may be later designated.

The award of the fellowships will be made, and notice thereof sent to all candidates, as soon as practicable after the examinations are held. The notice will probably be mailed not later than May 1. The income of these fellowships will be paid in three instalments, on September 1, January 1, and April 1.

The subjects covered by the examinations, with the precise time assigned to each (in 1899), are given below. Candidates for the fellowships offered by the Institute and by the School will omit No. 8. Candidates for the Fellowship in Christian Archaeology will omit Nos. 4, 5, and 7.

In the lists of books appended to Nos. 3-9, those in the first paragraph will serve to indicate the extent of the requirement in each case. Other books are named for supplementary reading and reference. For additional titles, candidates are referred to the list of "Books Recommended," which is published annually in the Appendix of the Journal of the Institute, where also some description and prices are added.

All letters on the subject of these fellowships should be addressed to Professor Minton Warren, Johns Hopkins University, Baltimore, Md. (from whom also additional copies of this circular may be obtained).

1. Latin. (Tuesday, March 14, 3-4:30 P.M.)

2. Greek. (Tuesday, March 14, 4:30-6 P.M.)

The examinations in these subjects are designed chiefly to test the candidate's acquaintance with the literary sources of investigation in classical history and archaeology, and his ability to read the classical authors for purposes of research.

3. The Elements of Latin Epigraphy. (Thursday, March 16, 9-11 A.M.)

a. J. C. Egbert, *Introduction to the Study of Latin Inscriptions* (New York, 1896), or R. Cagnat, *Cours d'épigraphie latine* (2d ed., Paris, 1890).

SUPPLEMENTARY: E. Hübner, *Römische Epigraphik* (in Iw. v. Müller's *Handbuch der klassischen Altertumswissenschaft*, Vol. I, 2d ed., pp. 625 ff.). H. Dessau, *Inscriptiones Latinae Selectae* (Vol. I, Berlin, 1892; Vol. II is soon to be published). G. M. Rushforth, *Latin Historical Inscriptions* (Oxford, 1893). W. M. Lindsay, *Handbook of Latin Inscriptions illustrating the History of the Language* (Boston, 1897).

REFERENCE: G. Wilmanns, *Exempla Inscriptionum Latinarum in usum praecipue academicum* (2 vols., Berlin, 1873). F. Ritschl, *Priscae Latinitatis Monumenta Epigraphica* (Berlin, 1862). E. Hübner, *Exempla Scripturae Epigraphicae* (Berlin, 1885).

b. (For candidates for the Fellowship in Christian Archaeology.) Northcote and Brownlow, *Roma Sotterranea*, Part III (see under 8).

SUPPLEMENTARY: G. B. de Rossi, *Inscriptiones Christianae Urbis Romae septimo saeculo antiquiores* (Rome, Vol. I, 1861; Vol. II, 1888). E. Hübner, *Inscriptiones Hispaniae Christianae* (Berlin, 1871), and *Inscriptiones Britanniae Christianae* (Berlin, 1876).

REFERENCE: F. X. Kraus, *Die altchristlichen Inschriften der Rheinländer* (Freiburg im Br., 1890). L. Le Blant, *Inscriptions chrétiennes de la Gaule* (Paris, 1856-65).

(See, further, Egbert's Introduction, pp. 1 ff.)

4. The Elements of Latin Palaeography. (Wednesday, March 15, 9-10 A.M.; to be omitted by candidates for the Fellowship in Christian Archaeology.)

E. M. Thompson, *Handbook of Greek and Roman Palaeography*, Chapters i-vii and xiii-xviii (New York, 1893), or C. Paoli, *Lateinische Palaeographie und Urkundenlehre*, 2 parts, tr. by K. Lohmeyer (Innsbruck, 1889,

1895); with practice in W. Arndt, *Schrifttafeln zur Erlernung der lateinischen Palaeographie* (Berlin, 1887, 1888), and E. Chatelain, *Paléographie des classiques latins* (Paris, 1884-).

SUPPLEMENTARY: Zangemeister and Wattenbach, *Exempla codicum Latinorum litteris maiusculis scriptorum* (Heidelberg, 1876, 1879). Ewald and Loewe, *Exempla scripturae Visigoticae* (Heidelberg, 1883).

REFERENCE: W. Wattenbach, *Anleitung zur lateinischen Palaeographie* (4th ed., Leipzig, 1886). W. M. Lindsay, *An Introduction to Latin Textual Emendation* (London, 1896). W. Wattenbach, *Das Schriftwesen im Mittelalter* (3d ed., Leipzig, 1896).

5. **The Physical and Political Geography of Ancient Italy.** (*Wednesday, March 15, 5-5:30 P.M.*; to be omitted by candidates for the Fellowship in Christian Archaeology.)

H. Kiepert, *Manual of Ancient Geography*, Chapter ix (London, 1881), and *Atlas Antiquus*, Tabb. vii-ix.

SUPPLEMENTARY: J. Jung, *Geographie von Italien* (in Iw. v. Müller's *Handbuch*, Vol. III, 3te Abtheilung, 2d ed., 1897, published separately). H. Nissen, *Italische Landeskunde* (Vol. I, Berlin, 1883).

6. **The Topography and Monuments of Ancient Rome and its Neighborhood.** (*Wednesday, March 15, 3-5 P.M.*)

O. Richter, *Topographie der Stadt Rom* (in Iw. v. Müller's *Handbuch*, Vol. III, pp. 725 ff.), or R. Lanciani, *The Ruins and Excavations of Ancient Rome* (London and Boston, 1897). A. Mau, *Führer durch Pompeii* (2d ed., Naples, 1896).

SUPPLEMENTARY: J. H. Middleton, *The Remains of Ancient Rome* (2 vols., London, 1892). R. Burn, *Ancient Rome and its Neighborhood* (London, 1895). R. Lanciani, *Ancient Rome in the Light of Recent Discoveries, and Pagan and Christian Rome* (London and Boston, 1888, 1893).

REFERENCE: O. Gilbert, *Geschichte und Topographie der Stadt Rom im Alterthum* (3 parts, Leipzig, 1883, 1885, 1890). H. Jordan, *Topographie der Stadt Rom im Alterthum* (Berlin, Vols. I, 1, 2; II, 1878, 1885, 1871). Overbeck-Mau, *Pompeii in seinen Gebäuden*, etc. (4th ed., Leipzig, 1884). Schneider, *Das Alte Rom* (Leipzig, 1896). Kiepert and Hülsen, *Formae Urbis Romae Antiquae* (Berlin, 1896), containing three excellent maps, with valuable topographical index. R. Lanciani, *Forma Urbis Romae* (Milan, 1893-).

7. **Introduction to Etruscan and Roman Archaeology** (Architecture, Sculpture, Painting, Pottery, Coins). (*Wednesday, March 15, 10 A.M.-12 M.*; to be omitted by candidates for the Fellowship in Christian Archaeology.)

a. ETRUSCAN. J. Martha, *L'Art étrusque* (Paris, 1889).

SUPPLEMENTARY: G. Dennis, *Cities and Cemeteries of Etruria* (3d ed., London, 2 vols., 1883). Durm, *Die Baukunst der Etrusker* (in his *Handbuch der Architektur*, Darmstadt, 1885).

REFERENCE: Gerhard, *Etruskische Spiegel* (5 vols., Berlin, 1843-93). Brunn and Körte, *I rilievi delle urne Etrusche* (Rome and Berlin, Vol. I, 1870; Vol. II, 1, 1890; Vol. II, 2, 1896).

b. ROMAN. J. Martha, *L'Archéologie étrusque et romaine*, Chapter v to end (Paris, 1884). Darm, *Die Baukunst der Römer* (in his *Handbuch der Architektur*, Darmstadt, 1885). F. B. Tarbell, *History of Greek Art* (Meadville, Pa., 1896). E. A. Gardner, *Handbook of Greek Sculpture*, especially the last chapter (London, New York, 1896, 1897). H. v. Rohden, *Malerei und Vasenkunde*, and R. Weil, (*Römische*) *Münzkunde* (in Baumeister's *Denkmäler des klassischen Altertums*, Vol. II, pp. 851-880, 963-968; Vol. III, pp. 1931-2011). Furtwängler, *Masterpieces of Greek Sculpture* (New York, 1895).

SUPPLEMENTARY: A. Choisy, *L'art de bâtir chez les Romains* (Paris, 1876). Lange, *Haus und Halle* (Leipzig, 1885). Brunn, *Denkmäler der griechischen und römischen Skulptur* (Munich, 1888-97). *Notizie degli scavi di antichità*. *Bullettino della commissione archaeologica comunale di Roma*. *Bullettino dell' istituto archeologico germanico*. *Mélanges d'archéologie et d'histoire of the French School in Rome*.

REFERENCE: Bernoulli, *Römische Ikonographie* (Stuttgart, I, 1882; II, 1, 1886; II, 2, 1891). Robert, *Die antiken Sarcophag-reliefs* (Vol. II, Berlin, 1890). W. Helbig, *Guide to the Public Collections of Classical Antiquities in Rome* (Leipzig, 1896). Helbig, *Untersuchungen über die campanische Wandmalerei* (Leipzig, 1873) and *Die Wandgemälde Campaniens* (Leipzig, 1868). Mau, *Geschichte der decorativen Wandmalerei in Pompeii* (Berlin, 1882). Mommsen, *Geschichte des römischen Münzwesens* (Breslau, 1860); or (better) the same, translated and enlarged by Blacas and De Witte, *Histoire de la monnaie romaine* (4 vols., Paris, 1873-75). Baumeister, *Denkmäler des klassischen Altertums* (3 vols., München and Leipzig, 1885-88).

8. **Introduction to Christian Archaeology** (Architecture, Sculpture, Painting). (Wednesday, March 15, 9 A.M.—12 M.; to be omitted by candidates for the fellowships offered by the Institute and by the School.)

F. X. Kraus, *Geschichte der christlichen Kunst* (Freiburg im Br., Vol. I, 1896, Vol. II, 1, 1897). J. S. Northcote and W. R. Brownlow, *Roma Sotterranea* (2d ed., 2 vols., London, 1879), or either of the following, which are based on the last-named work: F. X. Kraus, *Roma Sotterranea* (2d ed., Freiburg im Br., 1879), or P. Allard, *Rome Souterraine* (3d ed., Paris, 1877).

SUPPLEMENTARY: V. Schultze, *Archäologie der altchristlichen Kunst* (Munich, 1895). Pératé, *L'Archéologie chrétienne* (Paris, 1892). G. B. de Rossi, *Roma sotterranea cristiana* (3 vols., Rome, 1864-77). Holtzinger, *Die altchristliche Architektur* (Stuttgart, 1889). Bayet, *L'Art byzantin* (Paris, Quantin). *Bullettino di archeologia christiana*. *Römische Quartalschrift der christlichen Alterthümer*. *Byzantinische Zeitschrift*.

REFERENCE: Garrucci, *Storia dell' arte cristiana nei primi otto secoli della Chiesa* (6 vols., Prato, 1873-81). Konkadoff, *Histoire de l'art byzantin* (2

vols., Paris, 1886-91). Dehio and Bezold, *Die kirchliche Baukunst des Abendlandes* (Stuttgart, 1887-). Kraus, *Real-Encyclopaedie der christlichen Alterthümer* (2 vols., Freiburg im Br., 1882-86).

9. **Italian.** (*Thursday, March 16, 11 A.M.—12 M.*)

Candidates will be expected to show familiarity with the ordinary words and idioms of conversation, and ability to read simple Italian prose.

C. H. Grandgent, *Italian Grammar* (3d ed., Boston, 1894) and *Composition* (Boston, 1894). B. L. Bowen, *First Italian Readings* (Boston, 1896). T. Millhouse, *English-Italian and Italian-English Dictionary* (4th ed., 2 vols., London and New York). For additional reading the following works are recommended: Goldoni, *Il Burbero benefico* or *La Locandiera*; De Amicis, *La Vita militare*, *Spagna*, *Cuore*; Pellico, *Le mie Prigioni*; Verga, *Novelle*; and especially the archaeological papers published in Italian in the periodicals mentioned under 7 and 8.

Copies of the papers set at the examination of candidates for Fellowships in May last will be found in the Appendix, pp. 109-114.

From the beginning, the Committee has recognized that the system of appointing officers of instruction annually, with which, like the School at Athens, the School in Rome had at the outset to content itself, was one which must be abandoned at the earliest possible moment; and every report from the Directors,—the persons who were in a position to feel most keenly the shortcomings of the present system,—has expressed and emphasized this conviction. But the difficulty which has prevented action in the past continues to exist. After three years of successful work,—successful not merely in teaching, but also in discovery,—the School still has to seek its support from one year to another, with no certain outlook upon the future. Its record entitles it to a permanent place among the national Schools in Rome; it is situated in one of the most cosmopolitan of cities, and stands in the eye of the world; and the observer might well indulge the hope that some man or woman of large outlook would take satisfaction in establishing it in perpetuity, as a factor in American civilization. That hope must still be cherished.

WM. GARDNER HALE, *Chairman.*

UNIVERSITY OF CHICAGO,
October 1, 1898.

REPORT OF THE DIRECTOR

1897-98

To the Managing Committee of the American School of Classical Studies in Rome :

I have the honor to submit the following report on the conduct of the School during the year 1897-98.

The School year opened, in accordance with the Regulations, on Friday, October 15. The regular instruction began on the following Monday and continued until December 23, when a brief recess was taken for the holidays. Regular work was resumed on Monday, January 3, and continued until Friday, March 18, two days before the students left the city for their tour in Greece and Sicily.

The following students were in attendance from the beginning of the year until the close of the regular instruction:

Howard Crosby Butler, A.B. (Princeton, 1892); A.M. (*ibid.*, 1893); Lecturer on the History of Architecture in Princeton University, 1895-97; Fellow of the Institute.

Jesse B. Gilbert, A.B. (Otterbein University, 1897).

Anna Spalding Jenkins, A.B. (Smith College, 1890); A.M. (*ibid.*, 1897); Assistant in Latin in Smith College, 1895-97.

Clarence Linton Meader, A.B. (University of Michigan, 1891); Instructor in Latin since 1893, and Lecturer on Roman Law since 1894, in the University of Michigan; Fellow in Christian Archaeology.

George N. Olcott, A.B. (Columbia University, 1893); Fellow of the School.

Elizabeth Austin Rose, A.B. (De Pauw University, 1891).

Mary Gilmore Williams, A.B. (University of Michigan, 1895); Ph.D. (*ibid.*, 1897).

Of these seven students, Mr. Olcott had been a member of the School in the preceding year; the others were in their first year. Messrs. Butler, Meader, and Olcott, Miss Jenkins, and Miss Williams completed the full year's work in accordance

with the Regulations. Mr. Gilbert was obliged to leave Rome before the end of May. Miss Rose, from considerations of health, was unable to undertake the full year's work, but she attended nearly all the regular instruction.

Dr. Harry Edwin Burton, A.B. (Harvard, 1890), Ph.D. (*ibid.*, 1895), who was a regular member of the School in 1895-96, had intended to resume his membership at the beginning of the year, but was detained by illness in his family and did not join the School until January 3. The same cause prevented him from completing the year.

The courses of instruction given by the officers of the School were as follows:

From October to Christmas:

1. By the Director: a course on Latin Palaeography; two lectures a week, together with practical exercises on facsimiles.
2. By Professor Norton: a course on the Topography and Monuments of Ancient Rome; two lectures a week, given (with the exception of the first two) on the sites or before the monuments discussed. Special topics were also assigned to the students for individual investigation and report.

From January to March:

1. By the Director: a course on Latin Epigraphy, consisting mainly of practical exercises in the reading and interpretation of inscriptions, based on Egbert's *Introduction*, with some practice in the Galleria Lapidaria of the Vatican; two meetings a week (three to four hours).
2. By Professor Norton: a course on Greek, Roman, and Etruscan Art, given in the museums; two lectures a week.

In addition to these courses provided by the School, a number of our students availed themselves of the permission kindly given by Professor Hülsen to attend his lectures on topography, which began November 15 and continued through December; and some of them attended one or more of Professor Marucchi's lectures in the Catacombs, at his invitation.

The past winter was one of much sickness in Rome, which materially interfered with the courses which, following the example of my predecessors, I arranged for with resident professors. Professor Stevenson was prevented by pressing

engagements from beginning his lectures on Numismatics until January 26, and owing to subsequent illness was able to give us only twelve lectures in all. This result was foreseen some time in advance, and he modified his plans so as to cover the whole ground, but of course much less thoroughly than he would otherwise have done. Nevertheless, the course was exceedingly interesting and valuable, and our students travelled their two miles to the Vatican and sat their hour and a half in overcoat and hat in the frigid atmosphere of the Numismatic Cabinet with unchilled ardor, while the interest of the lecturer himself and the zeal with which, in response to our wishes, he resumed the course and continued it under most discouraging conditions of health, won our warm esteem. These conditions proved more serious than we supposed. I have here to record, with sincere sorrow, which I am sure will be shared by every member of the School, the death of our valued instructor, which occurred August 17. Professor Stevenson's lectures have formed an important part of our scheme of instruction from the first, and his premature death comes as a serious loss to the School.

It was also ill health, fortunately not prolonged, but coming at an inopportune time, that postponed the beginning of Professor Marucchi's course on Christian Archaeology until March 7, and limited it to five lectures. In the case of this course I thought it advisable to arrange for a more comprehensive treatment of the subject than Professor Marucchi had previously given to the School, inasmuch as Professor Norton, who was occupied with topography until Christmas, found it impossible to cover in his lectures on art the whole ground covered by his predecessors, whose courses on this subject began in the autumn. Accordingly it was thought best that he should not attempt to lecture on Christian Archaeology, and that, instead, Professor Marucchi should be invited to give a general introductory course on that subject. Professor Marucchi readily consented, but, for the reason stated, was not able to begin until within a fortnight of the departure of the

students for Greece. The subjects of the five lectures actually given were as follows:

1. The relations of Christianity with the Roman world during the first four centuries.
2. Customs of the early Christians. Our sources of information. Their meetings, liturgy, domestic churches, burial usages.
3. The ancient Christian cemeteries, called 'Catacombs'; their origin, general form, history; their position before the law; description of them in detail.
4. Contents of the ancient Christian cemeteries (Christian painting and sculpture).
5. Christian art and epigraphy (a demonstration in the Christian Museum of the Lateran).

The interest and importance of these topics to the student of classical antiquity, as well as to the student of Christian history, is obvious. The lectures were thoroughly enjoyed and appreciated by the School. Professor Marucchi speaks Italian with remarkable clearness, and his presentation of the subject was equally clear and admirable.

It appears from the experience of my predecessors, as well as from my own, that the arrangement of courses by resident scholars is beset with some difficulties. As long as our students remain here, for the most part, only one year, they cannot with the best advantage listen to lectures in Italian until after Christmas, when they have already begun to be deeply engrossed in their special studies, and when the time left for such courses is so short that sickness or accident may cut them down to very small proportions. Even under these circumstances, however, I regard the courses as not only valuable, but as a necessary part of our scheme; and it ought to be said, to offset the small number of lectures to which we are sometimes reduced, that the Roman lecturer is apparently not trained to regard an hour as the normal length of a lecture. In our case, certainly, we were given very liberal measure, the lecture often extending to an hour and a half or even two hours.

In addition to attending the stated instruction provided for them, the students did much for themselves, studying ancient

sites and monuments and familiarizing themselves with the rich treasures of the museums. In the autumn and early winter months they made a number of excursions to places of classical interest, under the energetic management of Mr. Olcott. The special investigations which they undertook and which I hope may yield some results suitable for publication, are as follows :

Mr. Meader began early in the year a study of the sculptured reliefs on Christian sarcophagi, with particular reference to the manner in which the scenes portrayed upon them were used by the artists to convey symbolic or other ideas. He has already presented a paper embodying his facts and conclusions.

Mr. Butler, who is a trained architect, began in the summer of 1897 a study of the Roman aqueducts in southern France. During the school year he continued his investigations with a careful examination of the aqueducts of Rome and Latium, including a magnificent one at Minturno, of which no description appears as yet to have been published. In this work he received much friendly counsel and assistance from Professor Lanciani, whose knowledge of the subject is unsurpassed. Mr. Butler studied the aqueducts as monuments of architectural design and construction, an aspect of the subject that has not received the attention it deserves. Out of a great mass of material collected he will present in his paper a careful description, with measurements, of typical examples of the three classes into which the aqueducts are divided by their structural form, those in stone (*opus quadratum*), those in rubble and *opus reticulatum*, and those in rubble and brick.

Mr. Olcott undertook a study of the palaeography of the coins of the Republic, for which purpose special arrangements were made, through the courtesy of Father Ehrle, the Prefect of the Vatican Library, to give him access to the rich Vatican collection. The collections in the Palazzo dei Conservatori and the Museo Kircheriano were also of service. Mr. Olcott further had the good fortune to come into possession of a number of sepulchral inscriptions, found by some workmen

near the Via Ostiensis, and has edited them for the Journal of the Institute.

Miss Williams, who had begun, as a graduate student at the University of Michigan, an investigation of the influence of the women of the imperial families, continued this investigation in Rome, collecting and studying especially the epigraphical evidence. The part of the subject which she completed and will present in her paper touches the three Augustae of the house of Severus, Julia Domna, Julia Maesa, and Julia Mamaea.

Miss Jenkins took for her subject the so-called Trajan reliefs in the Forum and has presented the results of a thorough study of their significance in a paper already in my hands.

Dr. Burton began an investigation of the so-called Temple of Fortuna Virilis in the Forum Boarium, but was obliged to suspend his work for the reason already stated.

Mr. Gilbert undertook and carried nearly to completion before his departure from Rome a collation of the *Vaticanus Lipsii* of Suetonius, a codex of the eleventh or twelfth century, of which, although its importance has long been recognized, no collation has yet been published.

In connection with Mr. Gilbert's work I began an examination of the other Suetonian manuscripts in the Vatican library. The investigation proved more interesting than I had anticipated, and more promising of substantial results; for these manuscripts have heretofore been regarded by editors of Suetonius as of little value, and have been neglected accordingly. Thus Roth, the editor of our present standard text (Teubner, 1857), possessed no adequate collation of any of them, and could cite only the meagre excerpts of Lipsius and others from the *Vaticanus Lipsii* and those of Gruter from the three *Palatini*. He knew of the existence of fourteen other *Vaticani*. There are in fact no less than twenty-one *Vaticani* alone, and besides these and the three *Palatini* the catalogues show four *Ottoboniani*, one *Urbinas*, and four in the Queen of Sweden collection, making thirty-three in all. Twenty-one of these are parchment codices, ranging in date from the eleventh to the

fifteenth century; the remaining twelve are paper copies of the fifteenth and sixteenth centuries.

In the time at my disposal I could not advantageously go through the whole of this list; but when the library closed, near the end of June, I had examined and excerpted all of the parchment codices except the *Palatini*, for which I shall have to rely on Gruter excerpts. During the summer I examined in a similar way a number of Suetonian manuscripts in other libraries,—five in Florence, five in Venice, one each in Munich and Leyden, and four in the British Museum.

The object of this investigation was not so much to establish the text at any point, as to do something towards breaking ground for a complete revision, the need of which is generally recognized and was impressed upon me with convincing force in the progress of this inquiry.

As one significant fact I may mention that in more than a dozen instances I found, sometimes in several manuscripts, readings which were known to Roth only as conjectures of himself and other scholars. Roth's text is based largely on the collations of his predecessors, who used the manuscripts to which they happened to have access,—manuscripts which in some cases can no longer be identified with certainty,—and cited only such readings as seemed to them important. From this it naturally resulted that many really important readings were left unrecorded, and many good manuscripts entirely neglected. An illustration of the first has just been given. As an example of the second I may refer to the Medicean manuscripts, of which three, known as the First, Second, and Third Medicean, are cited (not without some confusion of numbers) in the editions. Now there are, I find, of the thirteen Suetonian manuscripts in the Mediceo-Laurentian library, five of older date than the fifteenth century. One of these, the famous Third Medicean, was probably written in the eleventh century; the other four in the thirteenth or fourteenth. Why two of these four should be taken and the others left, it would be difficult to say, especially as one of them (64.9), which I have

called the Fifth, bears marks of close relationship with the Second, and is also related to two Vatican manuscripts (*Vat. Lat. 1860* and *7310*) and to two in the National Library in Paris.¹ Again, the manuscript in the Royal Library in Munich, which, though of late date, is of high merit and nearly related to the well-known *Gudianus* at Wölfenbüttel, appears to be quite unknown to the editors.

For a classification of the manuscripts, so essential to a correct estimate of the relative weight to be attached to them, it is obvious that Roth's material was entirely inadequate; and Becker, who has made the only important contributions to Suetonian textual criticism since Roth's edition was published, was not much better equipped. For a satisfactory revision of the text I am convinced that the whole work will have to be done over again from the beginning. It is true that the *Memmianus* and some of the other oldest manuscripts have been repeatedly collated; but the collations are not accessible to scholars, nor were they made with the completeness and precision demanded by the critical methods of the present day. Of some others, — for example, the Third Medicean, — no pretence of a complete collation has ever been made. Of the thirteenth and fourteenth century manuscripts, some, as we have seen, have been left entirely untouched. The whole number of manuscripts is so large that a collation of all of them is hardly practicable or even desirable; probably a considerable number can be safely dismissed with a very summary examination. But in the preliminary inquiry necessary for making the right selection no manuscript should be overlooked entirely, and every manuscript of any promise should be subjected to a more searching examination than has yet been made, with a view to determining, so far as possible, both its intrinsic worth and its relations to other manuscripts. To this work of selection and classification I hope the materials I have collected will enable me to make a useful contribution.

¹ For the evidence of the relation of these *Parisini* (5802 and 6116) to this group I am indebted to my colleague, Professor A. A. Howard.

Acting on the advice of Professor Richardson, Director of the School at Athens, our students made their applications individually to Dr. Dörpfeld for leave to accompany him on his tour through the Peloponnesus in April; but I also wrote to Dr. Dörpfeld, bespeaking his interest, and he replied in a most friendly spirit. By the time the applications were received, however, although they were sent in December, he was obliged to report that there were no places left. In this emergency Professor Norton generously consented to accompany our students, an arrangement with which they were more than satisfied. Mr. Norton's two years' experience in Greece as a student of the School at Athens made him an eminently competent guide, and the tour proved most delightful and profitable. This change of plan, however, made it desirable to begin the journey ten days earlier than had been intended, as we thought it wise to keep clear of Dr. Dörpfeld's large party, in view of the limited resources of the Peloponnesus for the entertainment of travellers. Our party accordingly left Rome March 20, and reached Patras on the morning of the 22d. After a day and a half in Olympia the party divided, the ladies going to Athens, while Professor Norton with the men made the rougher journey across the Peloponnesus, by way of Andritsena, — whence they made an excursion to Bassae, — Megalopolis, and Tripolitza, to Nauplia. Here the whole party reassembled, and visits were made to Epidaurus, Tiryns, Mycenae, and the Argive Heraeum. From Nauplia the travellers went to Athens, breaking the journey at Corinth to inspect the excavations which the American School is making there. This programme left about a fortnight for Athens, in the course of which an excursion was made to Delphi, where excavations by the French School are in progress. The party left Athens April 18 for Catania. The Sicilian tour, which they began at this point, included Syracuse, Taormina, and Messina, on the eastern coast, Girgenti and Selinunte on the southern, and finally Palermo. From Palermo they returned to Naples May 1, and proceeded to

Pompeii, where Professor Mau began his *giro* on the following day.

Professor Mau's course, which, as in previous years, had been specially arranged for the School, extended through ten days, of which seven were devoted to the *giro* in Pompeii, one to an excursion to the excavations at Boscoreale, and the last two to the Pompeian antiquities in the Museum at Naples. The lectures in Pompeii occupied three or four hours every afternoon, and on some days an equal amount of time in the morning; those in Naples four hours each morning. The lectures, in accordance with the preference of the students, were given in Italian, and were attended by every member of the School except one student who had heard them the preceding year. Of the value of this opportunity of studying Pompeii and its remains under such eminent guidance, it would be superfluous for me to speak. The pleasure of the experience was enhanced by the presence and the occasional instructive remarks of Professor von Wilamowitz Moellendorff, of the University of Berlin, who made one of our little company. After the conclusion of the course several of our party spent two or three additional days in private study in the Museum and in Pompeii, and some of us took advantage of the opportunity to visit Paestum and some of the more interesting places on the beautiful peninsula of Sorrento.

The civil and ecclesiastical authorities of Rome and the heads of foreign institutions, with whom I had occasion to come in contact, showed themselves friendly, as heretofore, and granted us valuable favors. Thanks to the thoughtfulness of my predecessor, Professor Warren, the way was made easy for me at the outset to come into personal relations with these officials. The Ministry of Public Instruction granted to every member of the School a card of free admission, for one year, to the national museums, galleries, excavations, and monuments throughout Italy; and Professor Barnabei, now the head of this division of the ministry, expressed to me his desire to aid the School in any other way in his power. With the aid of a letter from

our Ambassador, General Draper, I secured for our students the privilege of borrowing books from the large and well-equipped Biblioteca Vittorio Emanuele — a privilege of great value, in view of the present limited resources of our own library.

The presence of women as students of the School occasioned some hesitation, on the part of the pontifical authorities, in granting my application for *permessi* to the Vatican and Lateran museums; but after some further correspondence, and through the good offices of Monsignor O'Connell, Rector of the American College, a solution of the difficulty was reached. The *permessi* were granted, those for the young men in the usual form, those for the young women with a proviso added in writing, which limited their admission to the Galleria Lapidaria to other days than Tuesday and Friday. On those days the Borgia rooms of the Vatican are open, and the Galleria Lapidaria is a thoroughfare for the public. Whether this or some other consideration was the ground for the restriction, I was confident that it would not be insisted on after the first trial; and so it proved. The first *permessi* were issued for three months, and expired March 11. In response to my request to have them renewed, cards were granted for four additional months, and those sent to the young women were free from any restriction.

The question of admitting women to the privilege of collating manuscripts in the Vatican library I found had already been presented by the German Archaeological Institute, and settled, as usual, by a compromise. Women are not admitted to the Collating Room itself; but a place is provided for them in the large anteroom, where they can work with entire comfort and abundance of light, and the only substantial drawback is that they have not immediate access to the indexes and inventories, which are kept in the Collating Room. Father Ehrle showed himself most obliging and helpful to us; and in addition to the aid given us in such work as we undertook in his department, he devoted one afternoon in March to conducting the members of the School and their families, with some invited

guests (including three American students from German Universities, who were visiting Rome in their vacation), through the library, showing and explaining its oldest manuscripts and other rare treasures.

From the distinguished secretaries of the Imperial German Institute, Professor Petersen and Professor Hülsen, we experienced the same signal friendliness that they had shown towards the School from the beginning. Both officers and students received invitations to the semi-monthly meetings of the Institute, and many of us were constant in our attendance. We also enjoyed the free use of the excellent library of the Institute—an invaluable privilege, for without it, in the present state of our own library, our students' special investigations in archaeology could not have been carried on. I take this opportunity also to express my indebtedness to the Director of the Austrian Institute of Historical Studies, Dr. Theodor von Sickel, for many courtesies and for valuable counsel in palaeographical work.

This friendly and liberal treatment comes not merely from the promptings of generosity, but has a deeper root in the satisfaction with which the existence of our School is viewed by such men as Professor Petersen, who see in it a good augury for the future of classical studies, giving evidence, as it does, of the vigorous growth of those studies in America at a time when they are more and more threatened by materialistic tendencies in Europe.

Similar is the welcome given to our School by the lovers of art in Rome, a fact of which I had pleasing evidence. On April 21, the traditional birthday of the city of Rome, I had the honor of attending, together with Mr. Abbott, the Director of the American Academy, the annual banquet with which the day is celebrated by the Accademia di San Luca, a society of artists which has itself passed its tercentenary. We were not only treated as honored guests, but a toast, proposed by Professor Lanciani, to the prosperity of the two American institutions, was received with the utmost cordiality.

I may add that from quite another class, — from our own countrymen residing temporarily or permanently in Rome, persons of diverse interests, — I have received repeated assurances of their satisfaction in the existence of the School, as a representative of the intellectual side of our national life among a people who are too prone to believe that we are wholly given over to material pursuits.

One of the pleasantest privileges of the position which I had the honor to hold is the opportunity it affords of welcoming visiting American scholars to an American institution in Rome which is a centre of scholarly activity. Nor ought this in my judgment to be regarded merely as an incidental satisfaction, but as one of the services to be rendered by the School and one of the reasons for its existence. Such scholars find our School of much practical assistance to them in their study of the ancient city, and I have believed that I was carrying out your wishes in giving them free access to our library, and obtaining for them from the authorities such privileges as my position enabled me to secure. Among our visitors of the present year, I would name first Professor Platner, recently chosen Secretary of the Managing Committee, and a most efficient friend of the School from the start. Mr. Platner spent the winter and spring in Rome, and I was glad to seek his counsel on more than one occasion. We have also had the pleasure of seeing Professor Burton of Rochester University, another active member of the Managing Committee; also Professor Tarbell and Professor Miller of Chicago, Professor Cowles of Amherst, and Dr. Bates of the University of Pennsylvania, besides a number of distinguished scholars in other departments of learning.

I have acknowledged, with the thanks of the Managing Committee, the following gifts, received during the year :

From Sig. Giacomo Boni, of the Italian Ministry of Public Instruction, a plaster cast.

From Dr. H. E. Burton, a copy of *Hare's Walks in Rome*.

From Dr. Edmonston Charles, of Rome, a copy of Vol. IV (Ser. 3) of the *Atti della R. Accademia dei Lincei*.

- From the Syndics of the University Press, Cambridge, England, a copy of Conway's *Italic Dialects*.
- From Professor A. A. Howard, of Harvard University, a copy of Rose and Müller-Strübing's *Vitruvius*, a book out of print and very difficult to obtain. This volume has the additional interest of having been in the library of the late Professor G. M. Richardson, of the University of California, who died at Athens two years ago.
- From W. J. Stillman, Esq., a collection of more than sixty volumes, together with valuable pamphlets and unbound numbers of periodicals.
- From Mr. and Mrs. George W. Holland, a contribution of 75 lire towards the expenses of the School.
- Also, from Alden Sampson, Esq., of Bryn Mawr, Pa., as a loan without express limit of time, a large assortment of specimens (133 pieces) of the colored marbles used in building by the ancient Romans.

I have further to record the indebtedness of the School to Mr. Oleott for his voluntary services in revising and verifying the card catalogue of the library, and in extending it to include the accessions of the year,—a piece of work requiring much time and pains. The new accessions embrace a number of archaeological works and a set of the most important Greek authors, in which the library had been almost entirely deficient. With an appropriation of only \$500 a year, a considerable part of which goes for the purchase and binding of periodicals, the growth of the library must necessarily be slow, and I can think of no gift to the School that would be of greater immediate and permanent utility than a sum sufficient to double or quadruple our present stock of books. The library is the students' workshop, and while we gratefully appreciate the liberality of our German friends on the Capitol, the worker must always be sadly hampered whose tools are so scattered.

From my experience in managing the School I have formed a number of definite conclusions relating to its welfare, to two of which I should like briefly to call attention here. One of these is the need of a permanent director. This subject has been so fully and ably presented by my predecessors that I need only add my testimony to theirs, and express the hope that the Committee may see its way to beginning a permanent arrangement in the near future.

The other point to which I wish to call attention is the need of formulating a preparatory course of study for persons who propose to enter the School. At present we imply by our announcement that any graduate of a college can spend a year in the School with profit. And so indeed he can. But with a year's or even six months' judicious preparation he could spend his year there with twice or three times as much profit. If he goes to Rome straight from college, with no special training or preparation, he will use a third or a half of his precious year in doing what he might just as well have done at home, and the time of really fruitful work, by which I mean special and personal investigation, will be proportionally cut down. If he wishes to devote himself to archaeology, he can acquire at least the elements of the science in an American university. If his taste is for palaeographical work, the preliminary practice on facsimiles can be had equally well in America. The same is true of the study required for learning the language of inscriptions. We ought not to leave our students in ignorance of these facts. On the contrary, we ought to mark out for them courses of preparatory study, and at least impress upon them the great disadvantage of leaving this preparation to be done in Rome. In my judgment we ought to go even further, and, after due notice, make a certain amount of such preparation a requirement for admission to regular membership of the School. This would at once be a benefit to the students, and would relieve the School from the obligation of giving elementary instruction, thereby leaving the instructors more time for the guidance of students in their individual work, as well as for special studies of their own, which would naturally bear fruit in papers read before the School or in short courses of lectures. It would give them time, moreover, to plan and conduct archaeological excursions to ancient sites near Rome, and to some more remote,—a part of our scheme which cannot, under existing conditions, be carried out in the systematic way which its importance demands. I would not propose to make the preparation in question an absolute requirement

for admission to the School, at least for the present; for in many parts of the country the student would find it impossible to get the necessary instruction, and even without it he can, after all, spend a very profitable year in Rome. But I would require it for regular membership, because that would at once raise the instruction of the School to its proper plane, and would at the same time stimulate our universities, which are now developing their graduate departments so rapidly, to establish courses of instruction in these important subjects.

In conclusion, it gives me much pleasure to testify to the excellent spirit which prevailed in the School during the year and did much to render my task an agreeable one. I found in Professor Norton a most efficient colleague, and our relations were most cordial. The students were steadily and happily busy, full of zeal and of the inspiration of their opportunities. In watching their progress and the impressions which they gathered from their surroundings, and which will go with them into their life-work as classical teachers, I have been strengthened in the conviction that we did well to establish the School, and that we should not falter in our efforts to keep it alive and to improve it to the full measure of our ideal.

CLEMENT L. SMITH, *Director.*

HARVARD UNIVERSITY,
September, 1898.

